AD-A250 847

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

STUDY **PROJECT** 

THE ANTIETAM STAFF RIDE

An Interactive, Computer-Driven Guide to the Battle of Antietam

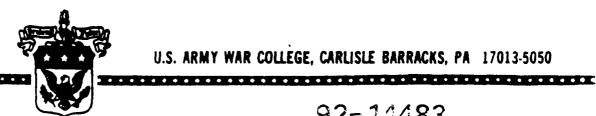


BY

COLONEL CARL D. SPRINGER, IN United States Army

DISTRIBUTION STATEMENT A: Approved for public release. Distribution is unlimited.

USAWC CLASS OF 1992



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

92-14483

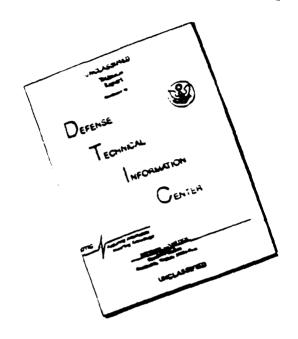
13 B 1 / F

		R	EPORT I	DOCUMENTATIO	N PAGE			Form Approved OMB No. 0704-0188
1a. REPORT SECURITY CLASSIFICATION		16. RESTRICTIVE	MARKINGS					
Uncla	ssified							
2a. SECURITY	CLASSIFICATIO	N AUTHO	ORITY			V/AVAILABILITY C		* *
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE		Approved for public release distribution unlimited						
TO DELECTION OF THE OWNER OWNER OF THE OWNER OWN								
4. PERFORMII	NG ORGANIZAT	TION REPO	ORT NUMBE	R(S)	5. MONITORING	ORGANIZATION	REPORT	NUMBER(S)
6a. NAME OF	PERFORMING	ORGANIZ	ATION	6b. OFFICE SYMBOL	7a. NAME OF M	ONITORING ORGA	NIZATIO	N
2 וו	Army War (	Co11eee	<u> </u>	(If applicable)	1			
L				<u> </u>	7h ADDRESS (C	in. Sana 710	Carla	
ĺ	(City, State, an				70. ADDRESS (CI	ity, State, and ZIP	Code)	
Carli	sle Barrac	cks, PA	A 17013-	-5050				
8a. NAME OF ORGANIZA	FUNDING/SPO ATION	ONSORING		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMEN	IT INSTRUMENT IC	ENTIFICA	ATION NUMBER
Re ADDRESS	City, State, and	d 719 Code		<u> </u>	10 SOURCE OF	FUNDING NUMBER	25	
OC. ADDAESS	chy, state, and	J 2// COOC	-/		PROGRAM	PROJECT	TASK	WORK UNIT
					ELEMENT NO.	NO.	NO.	ACCESSION NO.
11 TITLE (Inc	lude Security C	la asifi an si	1		<u> </u>	<u> </u>	<u> </u>	
	ETAM STAF		on)					
12. PERSONAL	AUTHOR(S)							<del> </del>
COL C	arl D. Spi	ringer						
13a. TYPE OF			3b. TIME CO	OVERED TO	14. DATE OF REPO 920415	ORT (Year, Month,	Day) 1	15. PAGE COUNT
16. SUPPLEME	NTARY NOTA	TION			_			
17.	COSATI	CODES		18. SUBJECT TERMS	Continue on reven	se if necessary an	d identifi	y by block number)
FIELD	GROUP		GROUP	1				, -,
				1				
				<u></u>				
19. ABSTRACT	(Continue on	reverse i	f necessary	and identify by block r	number)			
the user 1862 at interact 30 secon through with tex visual c situatio of battl field te formatio	with a construction of the continuous to descript ues such and case rrain. Ans and drives and drive	omprehe g, Mary user v minute s, animation of as gun rogram sualtie glossa ill, we	ensive, yland. views th snapsho mated mo faction fire an contain es. It ary of t eapons,	graphical pictual tuses a simple me movement of mots. The battle ovement. When we are occurring at an extensive also contains a serms is included.	are of the made point-and- military unites may be viewed one for that moment. The presented database on scanned color and containery, etc. The point of the presented and containery, etc.	ajor battles -click inter ts on a seri ewed one fra rame at a ti . Additiona I to aid in unit locati r photos of ins graphic he glossary continue	foughtace as of me at lly, sidescritons, makey leading and a direct an	a time or he user is provided
	TION / AVAILAB SIFIED/UNLIMIT			PT DTIC USERS	1	CURITY CLASSIFIC	ATION	
	F RESPONSIBLE					(Include Area Code	) 22c. (	OFFICE SYMBOL
	ard B. Sco				(717) 245-		1	WCAW

#### 19. Abstract continued

words and terms shown as italicized text. The user simply points and clicks on the word or term is left and the continuous term is the continuous term is the continuous term is the continuous term is the continuous term in the continuous terms of the continuous terms of

# DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

#### **USAWC Military Studies Program**

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

# The Antietam Staff Ride®

An Interactive, Computer-Driven Guide to the Battle of Antietam

by

Colonel Carl D. Springer, IN

Colonel Leonard Scott (Project Advisor)

Accesio	n For		
NTIS		7	
DTIC	_	Ε	- 1
Unanno			, (
Justific	ation		
By Distribution /			
Availability Codes			
Dist	Avail a Spe		
A-1			

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

15 April 1992

U.S. Army War College Carlisle Barracks, Pennsylvania 17013



#### **Abstract**

Author: Carl D. Springer, Colonel, US Army

Title: The Antietam Staff Ride®

Format: Individual Study Project

Date: 15 April 1992

Lines of Code: 2463

Classification: Unclassified

The Antietam Staff Ride® is a computer-driven guide to the battle of Antietam. It provides the user with a comprehensive, graphical picture of the major battles fought on 17 September 1862 at Sharpsburg, Maryland. It uses a simple point-and-click interface and is completely interactive. The user views the movement of military units on a series of color maps in 30 second to one minute snapshots. The battles may be viewed one frame at a time or through continuous, animated movement. When viewed one frame at a time, the user is provided with text description of actions occurring at that moment. Additionally, short audio and visual cues such as gun fire and cannon fire are presented to aid in describing the current situation. The program contains an extensive database on unit locations, movements, order of battle, and casualties. It also contains scanned color photos of key leaders and battlefield terrain. A glossary of terms is included and contains graphic depictions of regimental formations and drill, weapons, artillery gunnery, etc. The glossary is directly linked to words and terms shown as italicized text. The user simply points and clicks on the word or term to access the definition or graphic depiction. The Antietam Staff Ride was written using the hypermedia authoring application Aldus SuperCard®1. It runs on any color Apple® Macintosh® computer with a hard disk and eight megabytes of random access memory (RAM). The title Antietam Staff Ride is being registred and the application copyrighted by the Omar Bradley Foundation. Inc. All rights reserved.

# **Table of Contents**

	Page
Abstract	ii
Table of Contents	iii
List of Figures	iv
Introduction	1
General	4
Conclusions	7
Requirements and Installation	9
Starting The Antietam Staff Ride®	13
Menus and Commands	18
Battle Map	25
Battle Leaders	28
Order of Battle	29
Battle Casualties	3 1
Appendix A. SuperCard Scripts for The Antietam Staff Ride	3 2
Appendix B. Introduction to the Battle	8 1
Appendix C. Situation Brief for Hooker's Attack	85
Appendix D. Animated Sequence of Hooker's Attack	91
Appendix E. Order of Battle Examples	101
Appendix F. Map Legend	105
Appendix G. Disk Install Set	106
Notes	107
Bibliography	108

# **Figures**

Figure	Page
1. Hypermedia on the Macintosh	2
2. Initial Map Scan	4
3. Enhanced and Colored Map	4
4. The Two Layers of a Card	5
5. Disk 1 of the Antietam Staff Ride	9
6. Initial Installer Dialog Box	1 0
7. Installer Dialog Box showing final install segment	10
8. Alert Dialog Box	11
9. Selection Dialog Box	11
10. Compact Pro Progress Dialog Box	1 2
11. Installer Dialog Box	12
12. Unit Data Dialog Box	29
13. Subordinate Unit Data Displayed	2 9
14. CSA Order of Battle	3 0
15. Summary of USA Casualties	31

# The Antietam Staff Ride®

An Interactive, Computer-Driven Guide to the Battle of Antietam

#### Introduction

"A sower went out to sow his seed; and as he sowed, some fell along the path, and was trodden under foot, and the birds of the air devoured it. And some fell on the rock; and as it grew up, it withered away, because it had no moisture. And some fell among thorns; and the thorns grew with it and choked it. And some fell into good soil and grew, and yielded a hundred fold."<sup>2</sup>

Luke 8:4

This paper is the user's guide to the Military Studies Project titled "The Antietam Staff Ride<sup>®</sup>." The purpose of this project is to recreate the Antietam battle site and events of the battle through the use of computergenerated graphics and animation.

In the past we studied battles by reading books and analyzing terrain, unit positioning, and unit movement using maps and terrain walks. We had to visually piece a battle together based on what we read in the books, saw on the battle maps, and, if lucky, from actually walking the terrain upon which the battle was fought. The outcome of these battles resulted from a series of related events—usually occurring simultaneously. Written accounts of battles require the reader to mentally piece together a series of events described one sentence, paragraph, or chapter at a time. Some written accounts of battles do not provide any maps at all. When maps are available they are usually placed inconveniently in a book and require the reader to flip back and forth as he reads.

This project represents a new and innovative way of studying a battle. It uses the hypermedia authoring system called Aldus SuperCard to graphically present one of the Civil War's most complicated battles. This method of presenting information gives the user access to a plethora of

maps, pictures, graphs, photographs, sounds, facts, observations, interpretations, opinions, and commentaries—all at the same time. The user can navigate freely through a sea of information, creating his own pathways. "Hypermedia" is a more recent concept, based on many of the advances in computer technology over the past 30 years. Figure 1 illustrates this concept.<sup>3</sup>

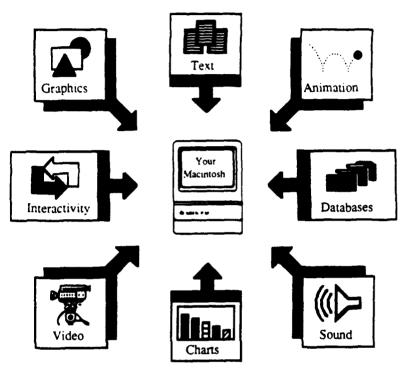


Figure 1. Hypermedia on the Macintosh

We now have personal computers with more memory, calculating speed, and storage space for information than most people dreamed possible in the early days of computers. Words are a powerful way to communicate, but they aren't the only way.

The development of computer applications has always been a difficult, labor-intensive process. It usually involves two major stages. First you write the program's core, the software engine that gives your application its basic functions. Second, you create the user interface, which in the pre-Macintosh era required only 10 percent of the development time. But times have changed, and so have user's expectations. Some Macintosh developers estimate that they now spend up to half their time working on the

interface for an application and the other half working on the application's core.4

With software like SuperCard you don't have to be a trained programmer. It uses an easy-to-learn programming language called SuperTalk. Much of the vocabulary of SuperTalk reads a lot like English. This allows the developer to oncentrate more on the content and user interface than on computer code.<sup>5</sup>

The technology required to produce an interactive, computer-driven military battle guide has been available for years—so why wasn't one developed before now? One reason is specialization. Historians studied history and computer scientists studied programming. The endless hours of detailed research required to understand and write about a battle left little time for the historian to learn more than basic word processing on the computer. Another reason is the lack of software tailored to narrow applications. Most commercial software tries to appeal to as broad a user spectrum as possible. Up until now, historians simply haven't had the tools to use a computer profitably.

#### General

"There are only two powers in the world, the sword and the pen; and in the end the former is always conquered by the latter." Napoleon I

In the next few paragraphs, I will describe how The Antietam Staff Ride was put together. I hesitate to say programmed because 50 percent of the my time was spent in reading and re-reading the accounts of the battle. Over half the remaining time was spent scanning, enhancing, and coloring the Antietam battlefield maps.

A small, hand-held scanner was used to scan the maps into the computer. The painting and drawing tools within SuperCard were used to enhance and color the maps. An initial scan of a section of map is shown in Figure 2. This same section of map enhanced and colored with SuperCard is shown in Figure 3.



Figure 2.
Initial Map Scan

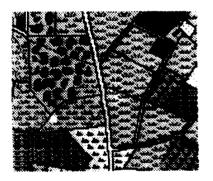


Figure 3. Enhanced and Colored Map

The map of Antietam prepared by Brevet Brigadier General N. Michler, Major of Engineers, in 1867 was used as the base map. However, graphics representing roads, fences, orchards, woods, grass fields, cornfields, and plowed fields were based on a reprint of the Cope survey maps prepared in 1863.7 The 1867 Michler map was used as the base map because of its small scale. Too much resolution was lost when the 1863 Antietam

battlefield map was scanned and then reduced in scale. Three maps used in the introduction were scanned from maps in the West Point Civil War Map Atlas.8

The basic SuperCard building blocks are projects, cards, and windows. Each card in SuperCard is part of a stack of cards. All information you see in a SuperCard file, or Project, appears on cards that you view through a window. Each card has two layers. The first layer is the card layer. This layer contains all text, graphics, buttons, and other information that are specific to that card only. The second layer, called the background layer contains all the card information that is shared with other cards in the same window. The maps in The Antietam Staff Ride are placed on the background layer. Unit symbols, buttons, text fields, etc. are placed on the card layer. Figure 4 shows the two layers of a card.9

Animation or the movement of a unit is accomplished by creating a graphic representing the unit on the card layer of a card. This graphic is then copied and pasted on a new card layer. After it is pasted to the new card layer it is moved to a new location. This is repeated until the unit is in its final position.<sup>10</sup>

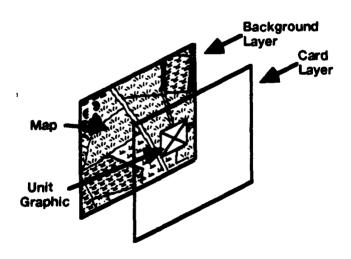


Figure 4. The Two Layers of a Card

The most difficult part of animating a battle is determining when to start a unit moving so that it will arrive at the correct location and at the correct time. This is fairly straight forward when you have only two or three brigades, but becomes extremely complicated when there are four Corps on the battlefield at the same time—each with three or more divisions. If the resolution is at the brigade level, then you could have up to 36 brigades to maneuver. And, this does not include the artillery batteries.

The Cope maps and the maps in John Priest's Antietam: The Soldiers' Battle were extremely helpful in scripting the animated battle sequences. The Cope maps show snapshots of unit locations in 15 to 30 minute intervals. Priest's maps are based on the Cope Maps but provide much more detail.<sup>11</sup>

## **Conclusions**

"One person with a belief is equal to a force of ninety-nine who only have an interest." 12

John Stuart Mill

The potential for applications like The Antietam Staff Ride are unlimited. Viewed prior to the actual on-the-ground staff ride, it provides an excellent preparatory study of the battle. Placed on a lightweight, notebook computer and taken on the actual staff ride, it provides a ready-reference for confirming unit locations and movements. Present-day and Civil Warera photographs of the battlefield may be viewed on site to assist in terrain orientation and appreciation. For those unable to visit the battlefield, it provides the next best thing to being there.

The computer-driven staff ride provides the means to study those battles and campaigns too difficult to study using the normal staff ride. The Battle of Atlanta and Sherman's march to the sea could easily be recreated in a computer-driven staff ride. Air and sea campaigns could also be recreated using this technique.

We are entering a whole new era—the decade of positive change. We must change the way we develop computer software. We can no longer afford to spend months defining requirements and rewriting these requirements into governmental contract language only to have the programmer misinterpret what we wanted. A product delivered using this development system is usually difficult to learn and use because the "user" was not involved in requirements or product development.

Today, ordinary people have access to powerful, easy-to-use computer technology. Hypermedia, authoring tools like SuperCard allow the average

Macintosh user to become a full-fledged programmer. Not only is the development time significantly reduced, but also the end product is much more "user-friendly"—software developed by users for users. With software like SuperCard and hardware like the Macintosh, your only limits will be the size of your ideas and the degree of your dedication.

## Requirements and Installation

Requirements. The Antietam Staff Ride's minimum requirements are any color-capable Macintosh with eight megabytes of Random Access Memory (RAM). The Antietam Staff Ride need at least 6.5 megabytes of RAM. If you are running System 7, turn off as many of your System extension as possible. You will also need a hard disk drive with at least ten megabytes of free space. Your Macintosh also needs to have System 6.05 (or higher) installed. System 7.0 or higher is highly recommended since the application uses the balloon help feature of System 7. If you do not have an up-to-date System, you can call your local Macintosh dealer—they're licensed to give you one.

**Installation.** This version of The Antietam Staff Ride comes on six 800 K floppy disks. Prior to installation turn off any virus detection applications. To install the application, insert Antietam Disk 1 into your Macintosh. The window shown in Figure 5 will appear on you desktop.

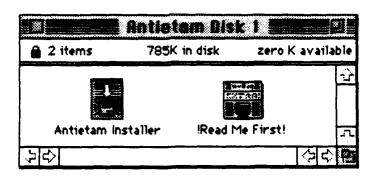


Figure 5. Disk 1 of The Antietam Staff Ride

Double-click on the file Antietam Installer. The installer dialog box. shown in Figure 6, will appear asking you where you want to load the final segment of the archive. Click on the Eject button to eject Antietam Disk 1.

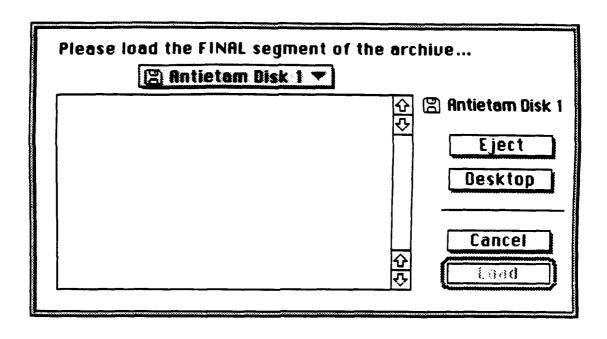


Figure 6. Initial Installer Dialog Box

Now insert Antietam Disk 6. The final file segment of the install set will appear in the installer dialog box window as shown in Figure 7.

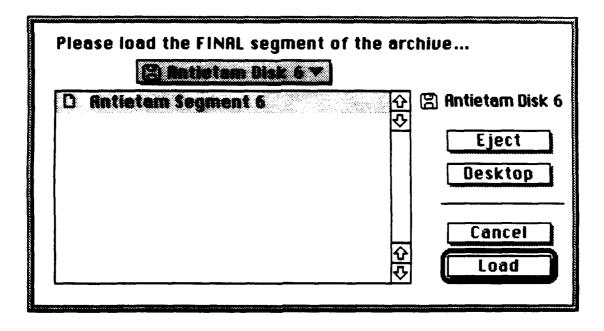


Figure 7. Installer Dialog Box Showing Final Install Segment

If the file Antietam Segment 6 is not already selected, then select it and click on the Load button. The Antietam Disk 6 containing the file Antietam

Segment 6 will be ejected. The alert dialog box shown in Figure 8 will appear asking you to reinsert the Antietam Disk 1.



Figure 8. Alert Dialog Box

After inserting the Antietam Disk 1, you will be presented with the selection dialog box shown in Figure 9.

Select D	estination Folder	
Volume: Folder:	— Hard Disk	£)868
Folder:	○ Applications ▼	Desktop
	☐ Adobe Photoshop 2.0 f ☐ Aldus FreeHand 3.1 f ☐ Aldus Persuasion 2.1 f ☐ Aldus SuperCard 1.6 f ☐ Aldus SuperPaint 3.0 f ☐ HyperCard 2.1 f ☐ Microsoft Word 5.0 f	Сancel Open  Ф Енtract

Figure 9. Selection Dialog Box

Navigate to the volume onto which you want The Antietam Staff Ride installed by clicking on the volume icon. Now navigate to the folder in which you want the application installed. In the example shown in Figure 9, the folder named Applications on the volume named Hard Disk has been selected. Now click on the Extract button and the application will begin installing. The application used to compress The Antietam Staff Ride into its install set is called Compact Pro. As Compact Pro extracts the files on the install set, it displays the progress dialog box shown in Figure 10.

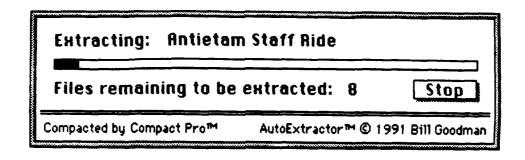


Figure 10. Compact Pro Progress Dialog Box

When all the data has been extracted from the installer segment, Antietam Disk I will be ejected and the dialog box shown in Figure 11 will appear.

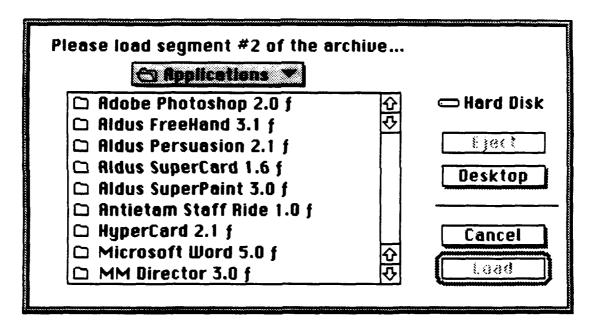


Figure 11. Installer Dialog Box

Insert Antietam Disk 2 and the file Antietam Segment 2 will appear in the installer dialog box window. Select this file and click the Load button

# Starting The Antietam Staff Ride

Start The Antietam Staff Ride by double-clicking on its icon. The Antietam Staff Ride icon looks like this:



Antietam Staff Ride

You can also start The Antietam Staff Ride by double-clicking on one of the document icons. The Antietam Staff Ride has three types of documents: glossary, photographs, and battle maps. The Antietam Staff Ride document icons look like this:





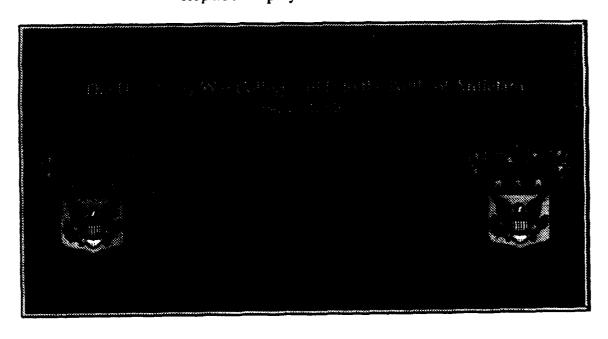


Glossary

Photographs

Battle Maps

The opening window When you start The Antietam Staff Ride, the About window appears and a brief selection from The Battle Hymn of the Republic plays. The About window looks like this:



Once the application has loaded into memory, the Chooser dialog box appears.

#### **Dialog Boxes**

A dialog box can present information to you, request information from you, or both. In most cases, dialog boxes appear in response either to a command that you have chosen or to some action that you have taken. When a dialog box requests information, it does so by presenting you with options.

Four kinds of options may be found in dialog boxes:

Preferences

Sound: © On Off

Units: O Build © Oon't Build

Artillery: © Show O Don't Show

- Radio buttons Within a group of options among which you may select only one, small round buttons appear before each option name. These are called radio buttons. To select or deselect a radio button, click on the round button itself or on the name of the option following the button. Only one radio button option in a set may be selected at a time: selecting any one will deselect all others. A set of radio buttons are usually physically adjacent. Several sets of radio buttons may appear in a single dialog box, but only one from each set may be selected at any one time. A radio button indicates that an option is selected when the button is filled black and is deselected when the button is empty.
- Check boxes Within a group of options among which you may select any number of alternatives, a small square button appears before each option name. This is a check box. To select or deselect a check box, click on the

square before the option name or directly on the option name itself. If that option was previously deselected, it will become selected; if it was selected, the option will become deselected. Multiple check boxes within a set may be selected or deselected. A check box indicates that an option is selected when an x is displayed and is deselected when the box is empty.

StyleWriter	
Copies:	Quality: 🔵 Best
Pages: O A	li
<b>●</b> F	rom: 1 To: 5

- Option boxes An option for which you must enter data has one or more option boxes. Most option boxes contain default data when the dialog box first appears. When this default data is selected (highlighted with white characters on a black background), you can enter new values from the keyboard and the default data will be replaced. To select a value in an option box, double-click on a newly entered value or drag over the current value. In a dialog box that contains several option boxes, you can move from one option box to the next by pressing the tab key.
- Find Unit

  Name: Lawton's Brigade ▼

  Cancel Find
- Pop-up menu An option that is presented as a pop-up menu displays only the current option setting when its dialog box first appears. To view the list of alternatives for such an option, you must select the current option (or an icon in some cases) by pressing and holding down the mouse button on top of it. This will "pop-up" a menu displaying the available options. An option is selected from the pop-up menu by dragging up or down the listing and releasing the mouse button when the name of the desired alternative is highlighted. If an option in a pop-

up menu is followed by an ellipsis (...), choosing it will bring up yet another dialog box, which contains additional options.



Once you have finished entering, selecting, and choosing options, you may exit a dialog box by clicking on buttons. The most common buttons are the OK and Cancel buttons. Buttons may also serve as commands when they are placed within dialog boxes, where they are used to indicate an action or bring up another dialog box.



Dialog boxes that do not request information are known as alert boxes, since their purpose is to alert you of some fact. Some alert boxes alert you of the consequences of the action you are about to take and allow you to abort that action. Others inform you of some event that has already happened, allowing you only to acknowledge that you are aware of the event.



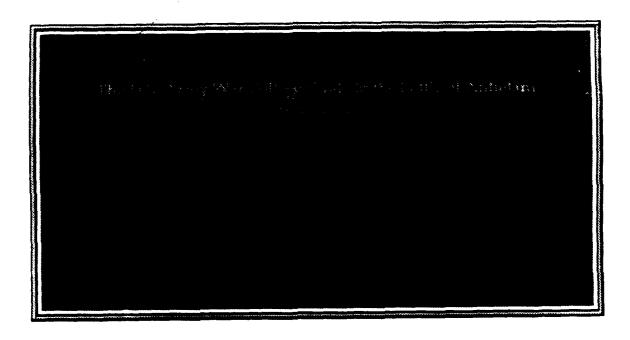
You will notice that an option, command, or menu is sometimes dimmed. A dimmed item indicates that it has no effect on a certain situation. Dimmed items cannot be chosen or selected.

## **Chooser Dialog Box**

The first window to appear after the About window contains the Chooser dialog box. This dialog box contains three buttons: Instructions, Introduction, and Battle Map. If you are not familiar with the Macintosh interface, click on the *Instructions* button and you will be presented with a tutorial on how to navigate through this application. (See Appendix A "SuperCard Scripts for The Antietam Staff Ride" to

view the program's code.) For a description of the events leading up the battle, click on the *Introduction* button. (See Appendix B - "Introduction to the Battle" to view the four maps and narrative contained in the *Introduction*.) Once you finish the introduction, you will go to the *Battle Map*. To go directly to the battle map, click on the *Battle Map* button.

The Chooser dialog box looks like this:



#### **Menus and Commands**

The following describes the menus and commands available when the Battle Map is displayed. Keyboard equivalents are listed in parentheses whenever applicable. The **Battle Map** and its menu bar look like this:





## The Apple (4) menu

The Apple menu behaves exactly as it does within all other Macintosh applications and at the Finder. You have access to all desk accessories currently available to your System file. When running under MultiFinder with System 6.x.x, your Apple menu also contains a list of other applications currently running. Choosing any one of these applications will

bring it forward as the active application and send The Antietam Staff Ride to the background.

**About Antietam...** Choose this command to display the same startup window that is displayed when launching the application. To close this window, click anywhere on the window.

Help... Choose this command to access The Antietam Staff Ride on-line help system. This allows you to access information about menus and commands without leaving the application.

# File Editor Pallet Print Map... %P Print Window... Print Selection... Preferences... Quit... %Q

#### The File menu

As in most Macintosh applications, The Antietam Staff Ride File menu controls document-level activities, including the editing, setting preferences, and printing maps.

Editor Pallet... The Editor Pallet command brings up the SuperCard Runtime Editor floating pallet. This pallet contains the menus available in the SuperCard Runtime Editor. The Runtime Editor allows you to make changes to The Antietam Staff Ride while it is running and immediately see the consequences of your editing. (See page 81 of the SuperCard Addendum 1.5.)

Print Map... (%-P) The Print Map command prints the current map of the current window. If the map is larger than the paper size in your printer, the map will be printed a section at a time on as many sheets of paper as necessary. You can then fit together the pieces of paper as though they were tiles of a larger picture.

**Print Window...** The **Print Window** command every card of the active window.

Print Selection... The Print Selection command allows you to select a portion of a map or card for printing. After choosing this command, your cursor will change to a cross hair. Place the cross hair at the upper left-hand corner of the area to be printed, press down on the mouse button, and drag to the bottom right-hand corner. After you release the mouse button, the area selected will be sent to the printer.

Preferences... The Preferences command brings up the Preferences dialog box which allows you to control the manner information is presented. Audio battle cues such as cannon and rifle fire can be turned on or off by selecting either the On or Off Sound radio button. Units may be displayed then hidden or remain on the map as subsequent units are displayed by selecting either the Builds or Don't Build Unit radio button. Divisional artillery may be displayed or remain hidden by selecting either the Show or Don't Show Artillery radio button.

The Preferences dialog box looks like this:

Preferences	
Sound:   On	Off
Units: 🔿 Build	● Don't Build
Artillery: 🔘 Show	O Don't Show
Cancel	OK

Quit (%-Q) The Quit command exits the Antietam Staff Ride application, closing all open windows.

Edit	
Undo	<b>3€Z</b>
Cut	36H
Copy	<b>%</b> C
Paste	3EU
Clear	
Select RII	æa
Show Clipboa	rd

#### The Edit menu

Most of the commands in the **Edit** menu will be familiar to you if you have worked in other Macintosh applications.

Undo (%-Z) The Undo command steps backward to the previous operation performed. The Undo command will be dimmed if the last operation cannot be undone.

Cut (%-X) The Cut command deletes one or more selected objects and stores them on the Macintosh Clipboard, replacing the Clipboard's previous contents. If no object is selected, the Cut command is dimmed.

Copy (%-C) The Copy command makes a copy of one or more selected objects and stores them in the Macintosh Clipboard, replacing the Clipboard's previous contents. If no object is selected, the Copy command is dimmed.

Paste (%-U) The Paste command makes a copy of the items in the Macintosh Clipboard and places them on the current card in the current window. If the Clipboard is empty, the Paste command is dimmed.

Clear (delete, backspace, or clear) The Clear command deletes one or more selected objects, but does so without placing them in the Clipboard or disturbing the Clipboard's contents. If no object is selected, the Clear command is dimmed.

Select All (%-A) The Select All command selects every object on the current card of the current window.

**Show Clipboard** The **Show Clipboard** command opens the Clipboard widow and displays the contents of the Clipboard.

#### Play

Hooker's Attack
Hood's Counterattack
Sedgwick's Attack
French's Attack
The Bloody Lane
Piper Farm
Christ's Attack
Burnside's Attack
R.P. Hill's Attack

#### The Play menu

The Play menu allows you to select and view animated replays of the Battle of Antietam. The battle has been divided into eight parts: Hooker's Attack, Hood's Counterattack, Sedgwick's Attack, French's Attack, The Bloody Lane, Piper Farm, Christ's Attack, Burnside's Attack, and A.P. Hill's Attack. This version covers Hooker's attack and Hood's counterattack. Follow-on versions will include the remaining battles and situations. A hierarchical menu will appear when you select one of the Play menu items. Each hierarchical menu contains a situation and several time period menu items.

**Situation...** This menu item brings up a battlefield map and a dialog box. Information on the

Hooker's Attack

Hood's Counterattack

Sedgwick's Attack

French's Attack

The Bloody Lane

Piper Farm

Christ's Attack

Burnside's Attack

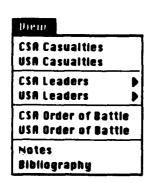
A.P. Hill's Attack

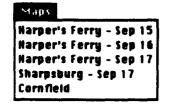
situation and disposition of units prior to this particular engagement is presented through a sequence of overlays and narrative text. A narrative explanation of each overlay is presented in the dialog box each time the Next button is clicked. Click on the Back button to return to the previous overlay and narrative explanation.

5:45 to 6:00 Each of the eight engagements listed is further divided into 15 to 30 minute segments. If you select the Situation menu item first, you may transition through each of the time segments. You also have the option of selecting a particular time segment.

# Hide All Towns Roads Farms Bridges Churches Industry Woods Fords CSA Infantry Units CSA Artillery Units

# Units Units Hide All CSA Infantry Units CSA Artillery Units USA Infantry Units USA Infantry Units





#### The Labels menu

The commands of the Labels menu toggle the display of Battle Map label overlays. These label overlays include the names of towns, roads, farms, bridges, churches, industry, woods, fords, and CSA and USA infantry and artillery units. A check mark appears before each overlay that is currently displayed. The Hide All command hides all currently displayed label overlays.

#### The Units menu

The commands of the **Units** menu toggle the display of CSA and USA infantry and artillery units. A check mark appears before each unit that is currently displayed. The **Hide** All command hides all currently displayed unit overlays.

#### The View menu

The commands of the View menu affect the display of battle casualty data, pictures of key leaders, order of battle data, notes, and the bibliography. A hierarchical menu pops up displaying the names of the key leaders when either the USA Leaders or CSA Leaders menu items are selected.

#### The Maps menu

The commands of **Maps** menu affect the display of the situation at Harper's Ferry on September 15, 16, and 17; the situation at Sharpsburg at dawn on September 17; and a map of the area around the Cornfield.

#### Graphics

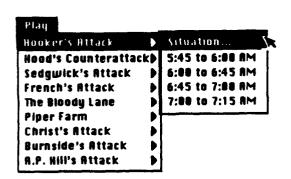
Map Legend Photo Markers Narrative Balloons

#### The Graphics menu

The commands of the **Graphics** menu affect the display of the map legend, photograph markers, and narrative balloons. The **Map Legend** menu item displays the graphics used on the maps to represent cover, roads, and fences. The map legend is shown in Appendix F. The **Photo Markers** menu item displays small white arrows on the current map. These arrows indicate the location and direction of view for a color photograph. To bring up the photograph, simply click on the arrow. The **Narrative Balloons** menu item displays small white balloons on the current map. These balloons indicate human interest stories that occurred at this location. To bring up the narrative, click on the balloon.

#### **Battle Map**

This section explains the use of the Battle Map menus and provides examples of the data available through use of these menus commands. Prior to viewing the animated battle, the user may access a situation brief for each of the phases listed in the Play menu. For example, to view the situation brief for Hooker's attack choose the Hooker's Attack command from the Play menu and a submenu is displayed at the right edge of the Hooker's Attack command. Continue holding the mouse button and drag the pointer to the submenu command Situation. Once the submenu command Situation is highlighted release the mouse button and the first situation narrative window will be displayed.

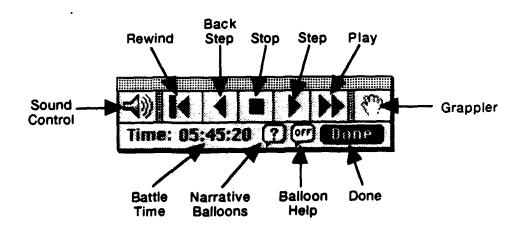


This window can be positioned anywhere on the screen by clicking on the shaded bar at the top of the window and dragging the window to a new position. To view the next narrative card, click the Next button. A new overlay or short animation is displayed with each new narrative card. To go back to the previous narrative and overlay, click on the Back button. The sequence of screen snapshots in Appendix C shows part of the situation brief for Hooker's Attack.

After the last situation narrative and overlay, you zoom to a small-scale battle map for the animated replay. When the small-scale battle map opens, the Battle Map is moved to the background of the screen and its menu is hidden. The first 10 map overlays in the animated sequence of Hooker's Attack is shown in Appendix D.

#### **Navigator Palette**

Control of the battle animation is done using the Navigator Palette. The Navigator Palette looks like this:





Sound Button If the sound waves are visible on the speaker, audio cues such as rifle and cannon fire will be played through the Macintosh stereo speakers. To turn the sound off, click once on the speaker and the sound waves will disappear. Click once again and the sound waves will reappear.



Rewind Button Click on the Rewind button to return to the first overlay in the animated sequence.



Back Step Button Click on the Back Step button to step back to the previous overlay.

Stop Button Click on the Stop button to stop the animated sequence.

Step Button Click on the Step button to step through the animated sequence one frame at a time. When stepping through the animated battle sequence, a dialog box is presented for each overlay describing the events taking place.

Play Button Click on the Play button view the animated movement of units at approximately one frame a second.

Grabbler The Grabbler is used to scroll the map.

Click on the Grabbler and your cursor will change to a small open hand. Click on the map and drag in the direction you want the map to move.

Done Button Click on the Done button to return to the large-scale Battle Map.

Balloon Help Click on the Balloon Help button to turn on System 7 balloon help. Once balloon help is on, when you place the cursor over any of the buttons on the Navigator Palette, a small balloon will pop up with a description of the button.

Narrative Balloons Click on the Narrative Balloons button to display small narrative balloons on the map. When clicked on, these balloons bring up a narrative concerning an event which took place at this point on the battlefield.

Time: 05:45:20 Battle Time The time displayed is the approximate battle time.

#### Battle Leaders

This user can view scanned photographs or paintings of the key leaders of the battle by using the View menu. For example, to display the photograph of Major General McCellan, choose the USA Leaders command from the View menu and a

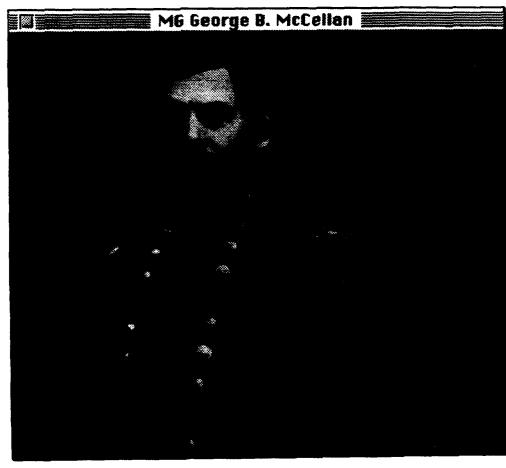
CSR Casualties
USR Casualties

CSR Leaders

USR Leaders

MG Ambrose E. Burnside
BG William H. French
BG John Gibbon
MG Joseph Hooker
MG beorge B. McLellan
MG Joseph Mansfield

submenu is displayed. Continue holding the mouse button down and drag the pointer to the submenu command MG George B. McCellan. Once the submenu command MG George B. McCellan is highlighted, release the mouse button and the photograph will appear.



### Order of Battle



You can access order of battle data two different ways. The first way is by clicking on a unit shown on the Battle Map. For example, when the unit labeled Hartsuff is clicked on, the unit data dialog box shown in figure 12 appears.

Commander: Brig. Gen. George L. Hartsuff
Unit: 3rd Brigade, 2nd Division, I Corps
Strength: 1000

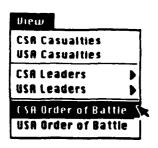
Figure 12. Unit Data Dialog Box

As the dialog box shows, Hartsuff is the commander of the 1st Brigade, 2nd Division, I Corps. If you click and hold the mouse down on the small balloon on the right side of the dialog box, the subordinate units of this brigade are displayed. When you let up on the mouse, the subordinate units are hidden. The subordinate unit data for Hartsuff's Brigade is shown in figure 13.

Third Brigade, Second Division

12th Massachusetts 11th Pennsylvania
83d New York (9th Militia) 13th Massachusetts

Figure 13. Subordinate Unit Data Displayed



The second way to access order of battle data is to choose either the CSA Order of Battle or USA Order of Battle command from the View menu. For example, if you choose the CSA Order of Battle command the window shown in figure 14 is displayed. The diagram in the window shows the subordinate corps, reserve artillery, and cavalry of the Army of Northern Virginia. Click on any of the subordinate unit names to view their order of battle diagram. The order battle charts go down to battalion level for infantry units and battery level for artillery units. See Appendix E for order of battle examples.

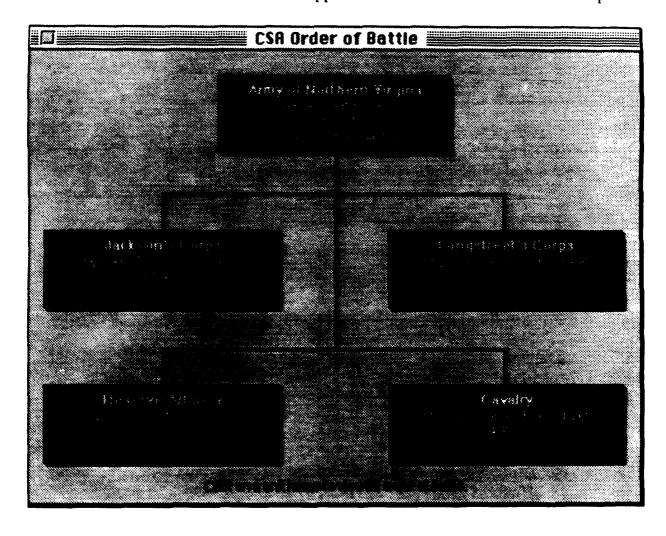


Figure 14. CSA Order of Battle

## **Battle Casualties**

Casualties for the USA and CSA can be viewed by choosing either the CSA Casualties or USA Casualties commands from the View menu. The USA casualty Chart in figure 15 is displayed when USA Casualties is selected from the View menu.

<b>388</b>		U E	SA Casu	alties				
Unit	Commander	Present	Engd	KIA	WIA	MIR	Total	Percent
I Corps	Hooker	14856						
	Doubleday		3425	140	638	34	812	23.7
	Ricketts		3158	172	946	86	1204	38.1
	Meade		2855	105	466	2	573	20.1
II Corps	Summer	18813						
	Richardson		4029	210	942	16	1168	29.0
	Sedgwick		5437	373	1593	244	2210	40.6
	French		5740	331	1498	151	1980	34.5
U Corps	Porter	12930						
	Sykes		2274	17	90	2	109	4.8
UI Corps	Franklin	12300						
	Slocum		(Unk)	6	58	2	66	(Unk)
	Smith		2585	66	277	31	374	14.5
IX Corps	Сон	13819						
	Willcox		3248	62	327	7	396	12.2
	Sturgis		3254	136	532	11	679	20.9
	Rodman		2914	225	821	148	1194	41.0
	Scammon		3154	36	192	27	255	8.1
XII Corps		10126						
	Williams		4735	160	863	135	1158	24.5
	Greene		2504	111	515	114	740	29.6
Cavalry		4320	4320	7	23	0	30	0.7
		87164	53632	2157	9717	1009	12882	24.0
	Done							ne

Figure 15. Summary of USA Casualties

## Antietam Staff Ride PROJECT SCRIPT

```
Antietam Staff Ride
Version 1.0bl6
THE MESSAGE HANDLERS USED IN THIS SCRIPT:
checkVersion, installMyMenus, loadMapName, openMapWindow, calculateWindowRest,
setPreferences.closeMyMenus,showNarrative,
THE FUNCTION HANDLERS USED IN THIS SCRIPT:
MOMD'S USED BY THIS SCRIPT:
none
---- Startup Scripts: ------
on openProject
   set cursor to watch
   hide menuBar
   check/ersion
   set the loc of wd "About Antietam" to the screenLoc
   play "Yankee Song"
   play "Yankee Song"
   setPreferences
   loadMapName
   installMyMenus
   hide msg
   visual dissolve slowly
   go next cd
   --openMapWindow
end openProject
on checkVersion
   set cursor to watch
   get version()
   put last word of it into verNum
   if verNum < 1.5 then
       set the loc of wd "Alerts" to the screenLoc
       open inv wd "Alerts"
       go cd "Alert 1"
       put "This project requires SuperCard version 1.5 or later."-
           into bg fld "Message" of cd "Alert 1" of this wd
       show this wd
       exit checkVersion
   end if
end checkVersion
```

```
on loadMapName
    Global ProjectName -- The name of this project.
    Global MapName -- The name of the map window.
    Global SectionName -- The name of the map card.
    set cursor to watch
    put the short name of this project into ProjectName
    put the short name of wd 2 into MapName
    put the short name of od 1 of wd 2 into SectionName
end loadMapName
on openMapWindow
    Global ProjectName
    Global MapName
    Global SectionName
    Global SoundIsOn
    set cursor to watch
    set the loc of wd MapName of ProjectName to -1000, -1000
    show menuBar
    open wd MapName of ProjectName
    set the scroll of wd MapName of ProjectName to 323,134
    calculateWindowRect
    set the rect of wd MapName of ProjectName to the result
    close wd "About Antietam" of ProjectName
    set the loc of wd "Introduction" of ProjectName to the screenLoc
    open wd "Introduction" of ProjectName
end openMapWindow
on calculateWindowRect
    set cursor to watch
    get the screenRect
    add 3 to item 1 of it
    add 40 to item 2 of it
    subtract 3 from item 3 of it
    subtract 3 from item 4 of it
    put it into windowRect
    return windowRect
end calculateWindowRect
---- Install Menus/Load Data Scripts: ------
on installMyMenus
   Global ProjectName
    Global RunTimeMens
    set cursor to watch
   put empty into RunTimeMens
    set lockMenus to true
    -- What menus are currently installed? Save their names into a variable.
    repeat with x = 1 to the number of current menus
       put the long name of currentMenu(x) into line x of RunTimeMens
    end repeat
    -- Now kill the menus.
```

```
repeat with x = 1 to the number of lines in RunTimeMens
       remove line w of RunTimeMens
    end repeat
    -- Now open my own menus.
    get the number of menus
    put it - 2) into numMenus
    repeat with x = 1 to numMenus
        insert menu x
    end repeat
    insert menu "Hocker's Attack" into item 1 of menu "Play"
    insert menu "Hood's Counterattack" into item 2 of menu "Play"
    insert menu "Sedgwick's Attack" into item 3 of menu "Play"
    insert menu "French's Attack" into item 4 of menu "Play"
    insert menu "USA Leaders" into item "USA Leaders" of menu "View"
    insert menu "CSA Leaders" into item "CSA Leaders" of menu "View"
end installMyMenus
on setPreferences
   Global ProjectName
   Global SoundIsOn
   Global ShowArtillery
   Global BuildUnits
   if the hilite of cd btn "On" of cd "Preferences" of wd "Preferences" is
true then
       put "Yes" into SoundIsOn
        set the checkMark of item "Sound On" of menu "Control" of ProjectName
to true
   else
       put "No" into SoundIsCn
        set the checkMark of item "Sound On" of menu "Control" of ProjectName
   end if
    if the hilite of cd btn "Show" of cd "Preferences" of wd "Preferences" is
       put "Yes" into ShowArtillery
   else
       put "No" into ShowArtillery
    end if
    if the hilite of cd btn "Build" of cd "Preferences" of wd "Preferences" is
true then
       put "Yes" into BuildUnits
       put "No" into BuildUnits
   end if
end setPreferences
                        ------
---- Shutdown Scripts:
on closeProject
   Global ProjectName
   Global SoundIsOn
```

```
set obrach to watch
    bloseMyMenus
    set numberformat to "0"
    put the freesize of this project into the Size
    if theSize > 200 then
        set the loc of wd "Notes" to the screenLoc
        put "Compacting the file"&return&ProjectName&"..." into-
            bg fld "Message" of cd "Note 1" of wd "Notes"
        open wd "Notes"
         Compact
        close wd "Notes"
    end if
    if the helpBalloons is true then
        set the helpBalloons to false
    end if
    if SoundIsOn is "Yes" then play "Taps"
    wait 6 seconds
end closeProject
on closeMyMenus
    set cursor to watch
    set the lockMenus to true
    put empty into menuList
    put empty into menusToKill
    -- First, find out which menus are mine.
    repeat with x = 1 to the number of menus
        put return & the long name of menu x after menuList
    end repeat
    -- Now find out which of my menus are installed.
    repeat with x = 1 to the number of current menus
        if currentMenu(x) is in menuList then
            put return & currentMenu(x) after menusToKill
        end if
    end repeat
    -- Now remove my installed menus.
    repeat with x = 1 to the number of lines in menusToKill
        if line x of menusToKill is not empty then
            remove line x of menusToKill
        end if
    end repeat
    set the lockMenus to false
end closeMyMenus
on showNarrative
    Global ProjectName
    set cursor to watch
    put the short name of the target into cardName
    set the loc of wd "Narrative" of ProjectName to the screenLoc
    open cd cardName of wd "Narrative" of ProjectName
end showNarrative
```

```
(MENU #1: Apple) ITEM #1: About Antietam...
on itemSelect
  Global ProjectName
  set the loc of window "About Antietam" to the screenLoc
  open window "About Antietam" of projectName
end itemSelect
(MENU #1: Apple) ITEM #2: Help...
on itemSelect
  answer "This option not available."
end itemSelect
MENU # 2: File
function projName theName
  -- parses the long name of a project from any other long name
  repeat with x = 1 to the number of words in the Name
    if word x of theName is "Project" then
      put word (x + 1) to the number of words in theName of theName into
projName
      delete char 1 of projname
      delete last char of projname
      return projName
    end if
  end repeat
  return empty
end projName
(MENU #2: File)
                  ITEM #1: Editor Pallet
on itemSelect
  editor pal
end itemSelect
(MENU #2: File) ITEM #3: Print Map...
on itemSelect
  answer "This option not available."
       Global MapName
        send "print card" to wd MapName
end itemSelect
(MENU #2: File) ITEM #4: Print Window...
on itemSelect
  answer "This option not available."
end itemSelect
```

```
(MENU #2: File) ITEM #5: Print Selection...
on itemSelect
  answer "This option not avaliable."
  --trace
  -- global ShowClipboardOpen
  -- repeat until not exists(last od gro of od "Clipboard" of wd "Clipboard"
        delete last gro of od "Clipboard" of wd "Clipboard"
  -- end repeat
  -- save all
  -- put SNAPict("Init") into a
  -- if the colorWorld) then put 1500 into tune
  -- else put 200 into tune
  -- if not hasMemory(tune * 1024) then
       open inv wd "Alerts"
       set loc of this wd to screenLoc()
       go ad "Alert 2"
       put "Requires 1500K of free memory to run adequately in color, and 200K-
       for black and white. " into bg fld "Message" of cd "Alert 2" of wd
"Alerts"
        show this wd
       exit itemSelect
  -- end if
     lock screen
  -- cut empty
  -- get hasMemory(8000 * 1024)
  -- put the number of grcs into saveNum
  -- put SnaPict("User")
  -- send "itemSelect" to item "Show Clipboard" of menu "Edit"
  -- setWindow wd "Clipboard"
  -- if the number of cd grcs <> saveNum then
       beep
        answer "Not enough memory to capture image."
        delete last cd grc of cd "Clipboard" of wd "Clipboard"
  -- end if
end itemSelect
(MENU #2: File)
                  ITEM #7: Preferences...
on itemSelect
  Global ProjectName
  set the loc of wd "Preferences" of ProjectName to the screenLoc
  open wd "Preferences" of ProjectName
end itemSelect
(MENU #2: File) ITEM #9: Quit
on itemSelect
  -- Close all wds to quit.
  Close all wds
end itemSelect
```

### ANTIETAM STAFF RIDE MENU # 3: Edit

in itemSelect
 answer "This option not available."
end itemSelect

### (MENU #3: Edit) ITEM #1: Undo

DN itemSelect
 revert -- works inconjuction with the save commands in
 -- the other menu items
END itemSelect

### (MENU #3: Edit) ITEM #2: -----

on itemSelect

end itemSelect

### (MENU #3: Edit) ITEM #3: Cut

on itemSelect
put the selectedField into sField
put the selectedChunk into sChunk
save
if sField is not empty
then if sChunk is not empty then select sChunk
out
end itemSelect

### (MENU #3: Edit) ITEM #4: Copy

on itemSelect copy end itemSelect

#### (MENU #3: Edit) ITEM #5: Paste

on itemSelect

- -- put the selectedField into sField
- -- put the selectedChunk into sChunk
- -- save
- -- IF sField is NOT empty
- -- THEN IF schunk is NOT empty THEN select schunk
- --set tool of this wd to pointer
- --set tool of this wd to browse

end itemSelect

#### (MENU\_#3: Edit) ITEM #6: Clear

```
in itemSelect
 Global ProjectName
  put the selectedChunk into sChunk
  put the selectedField into sField
  sar.e
  -- clear a text selection
  if sField is not empty then
    if sChunk is not empty then
      -- handle a flashing cursor in a word
      if word 4 of sChunk > word 2 of sChunk then
       select schunk
       put empty into the selection
      else do "select after char"%% word 4 of sChunk %% "of"%% sField -- WOFKS
AROUND BUG IN SC
   end if
   exit itemSelect
  end if
  -- text was not selected so save contents of clipboard to scrap
  open window "clipboard scrap" of ProjectName
 put empty into contents
  -- clipboard contains text
  if clipboard() = "Text" then
   put "Text" into contents
   choose browse tool
   select text of fld "Text Scrap"
   paste text
  end if
  -- clipboard contains objects
  if clipboard() = "Objects" then
   put "Object" into contents
   choose pointer tool
   paste objects
  end if
  -- clipboard contains card
  if clipboard() = "CARD" then
   put "CARD" into contents
   paste card
 end if
 close window "clipboard scrap" of ProjectName
 cut -- cut selected objects
  -- restore contents of clipboard
  open window "clipboard scrap" of ProjectName
  if contents is "Text" then
```

```
choose browse tool
    select text of field "Text Scrap"
    ರಬರ
  end if
  if contents is "Object" then
    choose pointer tool
    -- selected is an undocumented object property
    -- true = the object is selected
    -- false = the objected is not selected
    repeat with i=1 to the number of btns
     set the selected of btn i to true -- selected is undocumented property
    end repeat
    repeat with i=1 to the number of cd flds
     set the selected of cd fld i to true
    end repeat
    repeat with i=1 to the number of cd graphics
      set the selected of cd graphic i to true
    end repeat
    cut objects
  end if
  if contents is "Card" then
    go to card 2
    cut card
  end if
  close window "clipboard scrap" of ProjectName
end itemSelect
```

### (MENU #3: Edit) ITEM #7: Select All

on itemSelect
if the selectedField is not empty
then select text of the selectedField
end itemSelect

#### (MENU #3: Edit) ITEM #8: -----

on itemSelect

end itemSelect

#### (MENU #3: Edit) ITEM #9: Show Clipboard

on itemSelect
 answer "This option is not available."
end itemSelect

```
(MENU
        #4:
                Play): -----
in itemSelect
  Global ProjectName
  Global ProjectPlaying
  put "Hooker's Attack 1" into ProjectPlaying
  lock screen
  set the loc of wd "Cornfield" of project "Hooker's Attack 2" to the
screenLoc
  open wd "Cornfield" of project "Hooker's Attack 2"
  set the loc of wd "Cornfield" of ProjectPlaying to the screenLtd
  spen wd "Cornfield" of ProjectPlaying
  open wd "Navigator" of ProjectName
  set the checkMark of item "Palette" of menu "Control" of ProjectMame to true
  unlock screen
end itemSelect
(MENU #4: Play)
                   ITEM #1: Hooker's Attack
on itemSelect
  pass itemSelect
end itemSelect
                   ITEM #1: Hood's Counterttack
(MENU #4: Play)
on itemSelect
  pass itemSelect
end itemSelect
                   ITEM #1: Sedgwick's Attack
(MENU #4: Play)
on itemSelect
  pass itemSelect
end itemSelect
                   ITEM #1: French's Attack
(MENU #4: Play)
on itemSelect
  pass itemSelect
end itemSelect
(MENU #4: Play) ITEM #1: The Bloody Lane
on itemSelect
  pass itemSelect
end itemSelect
(MENU #4: Play)
                   ITEM #1: Piper Farm
on itemSelect
```

pass itemSelect

end itemSelect

### (MENU #4: Play) ITEM #1: Christ's Attack

on itemSelect
pass itemSelect
end itemSelect

### (MENU #4: Play) ITEM #1: Burnside's Attack

on itemSelect
 pass itemSelect
end itemSelect

#### (MENU #4: Play) ITEM #1: A.P. Hill's Attack

on itemSelect
 pass itemSelect
end itemSelect

### (MENU #5: Labels) ITEM #1: Hide All

On itemSelect
Global ProjectName
lock screen
set cursor to busy
get the number of items in menu "Labels" of ProjectName
put it into numGraphics
set cursor to busy
repeat with n = 2 to numGraphics
set cursor to busy
if the checkMark of item n of menu "Labels" of ProjectName is true then
send "itemSelect" to item n of menu "Labels" of ProjectName
end if
end repeat
unlock screen
end itemSelect

#### (MENU #5: Labels) ITEM #2: ------

on itemSelect
 pass itemSelect
end itemSelect

#### (MENU #5: Labels) ITEM #3: Towns

on itemSelect
Slobal ProjectName
Global MapName
setWindow wd MapName of ProjectName

```
set pursor to busy
  lock screen
 if the checkMark of the target is false then
    show gro "Sharpsburg"
    show gro "Mercersville"
    show ard "Porterstown"
    show gro "Smcketown"
    set the checkMark of the target to true
 else
    hide gro "Sharpsburg"
    hide gro "Mercersville"
    hide gro "Porterstown"
    hide gro "Smoketown"
    set the checkMark of the target to false
  end if
 unlock screen
end itemSelect
```

### (MENU #5: Labels) ITEM #4: Roads

```
on itemSelect
 Global ProjectName
 Global MapName
 setWindow wd MapName of ProjectName
 set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show grc "Hagerstown Pike"
    show gro "Smoketown Road"
    show grc "Boonsboro Pike"
    show grc "Shepherdstown Road"
    show grc "Lower Bridge Road"
    show grc "Sawmill Road"
    --show grc "Harpers Ferry Road" show grc "Linding Road"
    set the checkMark of the target to true
  else
    hide grc "Hagerstown Pike"
    hide grc "Smoketown Road"
    hide grc "Boonsboro Pike"
    hide grc "Shepherdstown Road"
    hide grc "Lower Bridge Road"
    hide grc "Sawmill Road"
    --hide grc "Harpers Ferry Road"
    hide grc "Landing Road"
    set the checkMark of the target to false
  end if
  unlock screen
end itemSelect
```

### (MENU #5: Labels) ITEM #5: Farms

```
in itemSelect
 Global ProjectName
 Global MapName
 setWindow wd MapName of ProjectName
 set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show are "Avey"
    show gro "Blackford"
    show gro "Clipp"
    show gro "Coffman"
    show gro "Cox"
    show gro "R. Domer"
    show gro "Ecker"
    show grc "Hauser"
    show grc "Heinz"
   show grc "Hoffman"
    show gro "Hotzel"
    show grc "Kennedy"
    show grc "Line"
    show grc "Magraw"
    show grc "C. Michael"
    show grc "Middlekauf"
    show grc "D.R. Miller"
    show grc "J.F. Miller"
    show gro "M. Miller"
    show grc "Morrison"
    show grc "Mumma"
    show grc "Neikirk"
    show grc "Newcomer"
    show grc "Newcomer "
    show grc "Nicodemus"
    show grc "D. Otto"
    show grc "J. Otto"
    show grc "H. Piper"
    show grc "S.D. Piper"
    show grc "A. Poffenberger"
    show grc "John Poffenberger"
    show grc "Jos. Poffenberger"
    show grc "S. Poffenberger"
    show grc "Pry"
    show grc "Reel"
    show grc "H. Rohrbach"
    show grc "N. Rohrbach"
    show grc "Roulette"
    show grc "Rowe"
    show grc "Schneibele"
    show grc "Sherrick"
    show gro "D. Smith"
    show gro "Snavely"
```

```
show gro "Thomas"
   set the sheskMark of the target to true
 else
   hide gra "Avey"
   hide gro "Blackford"
    hide gro "Clipp"
    hide gro "Coffman"
    hide gro "Cox"
    hide gro "R. Domer"
    hide gro "Ecker"
    hide gro "Hauser"
    hide gro "Heinz"
    hide gro "Hoffman"
   hide gro "Hotzel"
   hide gra "Kennedy"
   hide gro "Line"
   hide grc "Magraw"
   hide gro "C. Michael"
   hide gro "Middlekauf"
   hide gro "D.R. Miller"
   hide gro "J.F. Miller"
   hide gro "M. Miller"
   hide grc "Morrison"
   hide gro "Mumma"
   hide grc "Neikirk"
   hide gro "Newcomer"
   hide gro "Newcomer "
   hide gra "Nicodemus"
   hide gra "D. Otto"
   hide gro "J. Otto"
   hide grc "H. Piper"
   hide gro "S.D. Piper"
   hide grc "A. Poffenberger"
   hide grc "John Poffenberger"
   hide gro "Jos. Poffenberger"
   hide gro "S. Poffenberger"
   hide grc "Pry"
   hide grc "Reel"
   hide grc "H. Rohrbach"
   hide grc "N. Rohrbach"
   hide grc "Roulette"
   hide grc "Rowe"
   hide grc "Schneibele"
    hide gro "Sherrick"
    hide gro "D. Smith"
    hide gro "Snavely"
    hide gro "Thomas"
    set the checkMark of the target to false
  end if
  unlock screen
end itemSelect
```

### (MENU #5: Labels) ITEM #6: Bridges

```
on itemSelect
  Global ProjectName
  Blibal MapName
  setWindow wd MapName of ProjectName
 set cursor to busy
  lock soreen
  if the checkMark of the target is false then
    show gro "The Upper Bridge"
    show gro "The Middle Bridge"
    show gro "The Lower Bridge"
    set the checkMark of the target to true
  else
    hide gro "The Upper Bridge"
    hide gro "The Middle Bridge"
    hide ard "The Lower Bridge"
    set the checkMark of the target to false
  end if
 unlock screen
end itemSelect
```

## (MENU #5: Labels) ITEM #7: Churches

```
on itemSelect
 Global ProjectName
 Global MapName
  setWindow wd MapName of ProjectName
  set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show grc "Dunkard Church"
    show grc "Lutheran Church"
   show grc "Ground Squirrel Church"
    set the checkMark of the target to true
 eise
    hide gro "Dunkard Church"
    hide grc "Lutheran Church"
   hide grc "Ground Squirrel Church"
    set the checkMark of the target to false
  end if
  unlock screen
end itemSelect
```

## (MENU #5: Labels) ITEM #8: Industry

```
on itemSelect
Global ProjectName
Global MapName
setWindow wd MapName of ProjectName
set cursor to busy
lock screen
```

```
if the thetkMark of the target is false then show gro "New Industry"
show gro "Juarry"
show gro "Stone Mill"
show gro "S. Pry Mill"
set the thetkMark of the target to true else
hide gro "New Industry"
hide gro "Quarry"
hide gro "Stone Mill"
hide gro "Stone Mill"
set the thetkMark of the target to false end if
unlock screen
```

#### (MENU #5: Labels) ITEM #9: Woods

```
on itemSelect
  Global ProjectName
  Global MapName
  setWindow wd MapName of ProjectName
  set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show gro "The North Woods"
    show gro "The East Woods"
    show gro "The West Woods"
    set the checkMark of the target to true
  else
    hide gro "The North Woods"
    hide gra "The East Woods"
   hide grc "The West Woods"
    set the checkMark of the target to false
 end if
 unlock screen
end itemSelect
```

### (MENU #5: Labels) ITEM #10: Fords

```
In itemSelect
Global ProjectName
Global MapName
setWindow wd MapName of ProjectName
set cursor to busy
lock screen
if the checkMark of the target is false then
show gro "Snavely's Ford"
show gro "Myer's Ford"
set the checkMark of the target to true
else
```

```
hide gro "Snavely's Ford"
hide gro "Myer's Ford"
set the checkMark of the target to false
end if
unlock screen
end itemSelect
```

## (MENU #5: Labels) ITEM #11: ----

on itemSelect
 pass itemSelect
end itemSelect

### (MENU #5: Labels) ITEM #12: CSA Infantry Units

```
on itemSelect
 Global ProjectName
 Global MapName
 setWindow wd MapName of ProjectName
 set cursor to busy
 lock screen
 if the checkMark of the target is false then
   show grc "Jones Label"
    show grc "Grigsby Label"
    show grc "Lawton Label"
    show grc "31GA Label"
    show grc "Trimble Label"
    show grc "Ripley Label"
    show grc "Taliaferro Label"
    show grc "Starke Label"
    show grc "Law Label"
    show grc "Wofford Label"
    show grc "Hays Label"
    show gro "Early Label"
    show grc "Cav Label"
    set the checkMark of the target to true
 else
    hide grc "Jones Label"
    hide grc "Grigsby Label"
    hide grc "Lawton Label"
    hide grc "31GA Label"
    hide grc "Trimble Label"
    hide grc "Ripley Label"
    hide grc "Taliaferro Label"
    hide grc "Starke Label"
    hide grc "Law Label"
    hide grc "Wofford Label"
    hide grc "Hays Label"
    hide grc "Early Label"
    hide grc "Cav Label"
    set the checkMark of the target to false
  end if
```

```
if the checkMark of item "CSA Infantry" of menu "Units" of ProjectName is false then—
send itemSelect to item "CSA Infantry" of menu "Units" of ProjectName unlock screen
end itemSelect
```

### (MENU #5: Labels) ITEM #13: CSA Artillery Units

```
on itemSelect
  Global ProjectName
  Global MapName
  setWindow wd MapName of ProjectName
  set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show grc "Poague Label"
    show grc "S D Lee Label"
    show grc "Patterson Label"
    show grc "Johnson Label"
    show grc "Brockenbrough Label"
    show grc "Pelham Label"
    show grc "Carpenter Label"
    show grc "Wooding Label"
    show grc "Balthis Label"
    show grc "Raine Label"
    show grc "Ross Label"
    show grc "D'Aquin Label"
    set the checkMark of the target to true
  else
    hide grc "Poague Label"
    hide grc "S D Lee Label"
    hide grc "Patterson Label"
    hide grc "Johnson Label"
    hide grc "Brockenbrough Label"
    hide grc "Pelham Label"
    hide grc "Carpenter Label"
   hide grc "Wooding Label"
   hide grc "Balthis Label"
   hide grc "Raine Label"
   hide grc "Ross Label"
   hide grc "D'Aquin Label"
    set the checkMark of the target to false
 end if
  if the checkMark of item "CSA Artillery" of menu "Units" of ProjectName is
false then-
 send itemSelect to item "CSA Artillery" of menu "Units" of ProjectName
 unlock screen
end itemSelect
```

```
(MENU
                          ITEM
                                 #14:
        #5:
              Labels)
                                        *********
on itemSelect
  pass itemSelect
end itemSelect
(MENU #5: Labels) ITEM #15: USA Infantry Units
on itemSelect
  Global ProjectName
  Global MapName
  setWindow wd MapName of ProjectName
  set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show gro "Hofmann Label"
    show grc "Patrick Label"
    show grc "Gibbon Label"
    show grc "Phelps Label"
    show grc "Christian Label"
    show grc "3PA Cav Label"
    show grc "Anderson Label"
    show grc "Magilton Label"
    show grc "Hartsuff Label"
    show grc "Duryea Label"
    show grc "PA Res Label"
    show grc "2PA Label"
    show grc "13PA Label"
    show grc "5PA Label"
    show grc "Hooker Label"
    set the checkMark of the target to true
  else
    hide grc "Hofmann Label"
    hide grc "Patrick Label"
    hide grc "Gibbon Label"
    hide grc "Phelps Label"
    hide grc "Christian Label"
    hide grc "3PA Cav Label"
    hide grc "Anderson Label"
    hide grc "Magilton Label"
    hide grc "Hartsuff Label"
    hide grc "Duryea Label"
    hide grc "PA Res Label"
    hide grc "2PA Label"
    hide grc "13PA Label"
    hide grc "5PA Label"
    hide grc "Hooker Label"
    set the checkMark of the target to false
  end if
  if the checkMark of item "USA Infantry" of menu "Units" of ProjectName is
     send itemSelect to item "USA Infantry" of menu "Units" of ProjectName
```

unlock screen end itemSelect

### (MENU #5: Labels) ITEM #16: USA Artillery Units

```
on itemSelect
  Global ProjectName
  Global MapName
  setWindow wd MapName of ProjectName
  set cursor to busy
  lock screen
  if the checkMark of the target is false then
    show gro "Campbell Label"
    show gro "Edgell Label"
    show gra "Monroe Label"
    show grc "Reynolds Label"
    show grc "Ransom Label"
    show grc "Thompson Label"
    show grc "Cooper Label"
    show grc "Matthews Label"
    show grc "Simpson Label"
    set the checkMark of the target to true
 else
    hide grc "Campbell Label"
    hide grc "Edgell Label"
    hide grc "Monroe Label"
    hide grc "Reynolds Label"
    hide grc "Ransom Label"
    hide grc "Thompson Label"
    hide grc "Cooper Label"
    hide grc "Matthews Label"
   hide grc "Simpson Label"
    set the checkMark of the target to false
  end if
  if the checkMark of item "USA Artillery" of menu "Units" of ProjectName is
false then-
  send itemSelect to item "USA Artillery" of menu "Units" of ProjectName
 unlock screen
end itemSelect
```

### (MENU #6: Units) ITEM #1: Hide All

```
on itemSelect
Global ProjectName
lock screen
set cursor to busy
get the number of items in menu "Units" of ProjectName
put it into numGraphics
set cursor to busy
repeat with n = 2 to numGraphics
set cursor to busy
```

```
if the theckMark of item n of menu "Units" of ProjectName is true then
      send "itemSelect" to item n of menu "Units" of ProjectName
   end if
  end repeat
  if the checkMark of item "CSA Infantry" of menu "Units" is true then
    set the checkMark of item "CSA Infantry Units" of menu "Names" of
ProjectName to false
  end if
  if the checkMark of item "CSA Artillery" of menu "Units" is true then
    set the checkMark of item "CSA Artillery Units" of menu "Names" of
ProjectName to false
  end if
  if the checkMark of item "USA Infantry" of menu "Units" is true then
    set the checkMark of item "USA Infantry Units" of menu "Names" of
ProjectName to false
  end if
  if the checkMark of item "USA Artillery" of menu "Units" is true then
    set the checkMark of item "USA Artillery Units" of menu "Names" of
ProjectName to false
  end if
 unlock screen
end itemSelect
```

### (MENU #6: Units) ITEM #2: -----

on itemSelect
 pass itemSelect
end itemSelect

### (MENU #6: Units) ITEM #3: CSA Infantry

```
on itemSelect
 Global ProjectName
 Global MapName
 setWindow wd MapName of ProjectName
 set cursor to busy
 lock screen
 if the checkMark of the target is false then
    show grc "Jones"
    show grc "Grigsby"
    show grc "Lawton"
    show grc "31GA"
    show grc "Trimble"
    show grc "Ripley"
    show grc "Law"
    show grc "Wofford"
    show grc "Taliaferro"
    show gro "Starke"
    show grc "Hays"
    show grc "Early"
    show grc "Cav 1"
```

```
show gro "Cav 2"
    show gro "Cav 3"
    show gro "Cav 4"
    show gro "Cav 5"
    show grc "Jones Label"
    show gro "Grigsby Label"
    show grc "Lawton Label"
    show grc "31GA Label"
    show grc "Trimble Label"
    show gro "Ripley Label"
    show gro "Law Label"
    show grd "Wofford Label"
    show grd "Taliaferro Label"
    show gro "Starke Label"
    show grc "Hays Label"
    show grc "Early Label"
    show grc "Cav Label"
    set the checkMark of the target to true
    if the checkMark of item "CSA Infantry Units" of menu "Labels" is false
      set the checkMark of item "CSA Infantry Units" of menu "Labels" of
ProjectName to true
    end if
  else
    hide grc "Jones"
    hide grc "Grigsby"
    hide grc "Lawton"
    hide grc "31GA"
    hide grc "Trimble"
    hide grc "Ripley"
    hide grc "Law"
    hide grc "Wofford"
    nide grc "Taliaferro"
    hide grc "Starke"
    hide grc "Hays"
    hide grc "Early"
    hide grc "Cav 1"
    hide grc "Cav 2"
    hide grc "Cav 3"
    hide grc "Cav 4"
    hide grc "Cav 5"
    hide grc "Jones Label"
    hide grc "Grigsby Label"
    hide grc "Lawton Label"
    hide gro "31GA Label"
    hide gro "Trimble Label"
    hide grc "Ripley Label"
    hide grc "Law Label"
    hide grc "Wofford Label"
    hide gro "Taliaferro Label"
    hide gro "Starke Label"
```

```
hide grt "Hays Label"
hide grt "Early Label"
hide grt "Cav Label"
set the checkMark of the target to false
if the checkMark of item "CSA Infantry Units" of menu "Labels" is true
then
set the checkMark of item "CSA Infantry Units" of menu "Labels" of
ProjectName to false
end if
end if
unlock screen
end itemSelect
```

### (MENU #6: Units) ITEM #4: CSA Artillery

```
on itemSelect
 Global ProjectName
 Global MapName
 setWindow wd MapName of ProjectName
 set cursor to busy
 lock screen
 if the checkMark of the target is false then
   show grc "Poague"
   show grd "Brockenbrough
   show grc "Patterson"
    show grc "S D Lee"
    show grc "Johnson"
    show gro "Pelham"
    show grc "Carpenter"
    show grc "Wooding"
    show grc "Balthis"
    show grc "Paine"
    show grc "Ross"
    show grc "D'Aquin"
    show gro "Poague Label"
   show grc "Brockenbrough Label"
    show gro "Patterson Label"
    show grc "S D Lee Label"
   show grc "Johnson Label"
    show grc "Pelham Label"
    show grc "Carpenter Label"
    show grc "Wooding Label"
    show grc "Balthis Label"
    show grc "Raine Label"
    show grc "Ross Label"
    show grc "D'Aquin Label"
    set the checkmark of the target to true
    if the checkMark of item "CSA Artillery Units" of menu "Labels" of
ProjectName is false then
      set the checkMark of item "CSA Artillery Units" of menu "Labels" of
ProjectName to true
```

```
end if
 else
    hide gro "Poague"
    hide gro "Brockenbrough"
    hide gro "Patterson"
    hide gro "S D Lee"
    hide gro "Johnson"
    hide gro "Pelham"
    hide gro "Carpenter"
    hide gro "Wooding"
    hide gro "Balthis"
    hide gro "Raine"
    hide gro "Ross"
    hide gro "D'Aquin"
    hide gro "Poaque Label"
    hide grd "Brockenbrough Label"
    hide gro "Patterson Label"
    hide gro "S D Lee Label"
    hide gro "Johnson Label"
   hide gro "Pelham Label"
   hide gro "Carpenter Label"
   hide gro "Wooding Label"
   hide gro "Balthis Label"
    hide gro "Raine Label"
    hide gro "Ross Label"
    hide grc "D'Aquin Label"
    set the checkmark of the target to false
    if the checkMark of item "CSA Artillery Units" of menu "Labels" of
ProjectName is true then
      set the checkMark of item "CSA Artillery Units" of menu "Labels" of
ProjectName to false
    end if
  end if
 unlock screen
end itemSelect
```

## (MENU #6: Units) ITEM #5: -----

on itemSelect
pass itemSelect
end itemSelect

### (MENU #6: Units) ITEM #6: USA Infantry

```
on itemSelect
Global ProjectName
Global MapName
setWindow wd MapName of ProjectName
set cursor to busy
lock screen
if the sheckMark of the target is false then
```

```
show gro "Hofmann"
    show gro "Patrick"
    show gro "Gibbon"
    show gro "Phelps"
    show gro "Christian"
    show gro "3PA Cay"
    show ard "Anderson"
    show gro "Magilton"
    show gro "Hartsuff"
    show grc "Duryea"
    show gro "PA Res"
    show gro "2PA"
    show gra "
               .3PA"
    show gro "5PA"
    show gro "Hofmann Label"
    show gro "Patrick Label"
    show gra "Gibbon Label"
    show grc "Phelps Label"
    show grc "Christian Label"
    show gro "3PA Cav Label"
   show grc "Anderson Label"
   show gro "Magilton Label"
   show grc "Hartsuff Label"
   show grc "Durrea Label"
   show grc "PA Res Label"
   show grc "2PA Label"
   show grc "13PA Label"
    show grd "5PA Label"
    set the checkMark of the target to true
    if the checkMark of item "USA Infantry Units" of menu "Labels" of
ProjectName is false then
      set the checkMark of item "USA Infantry Units" of menu "Labels" of
ProjectName to true
   end if
 else
   hide grc "Hofmann"
   hide grc "Patrick"
   hide grc "Gibbon"
   hide grc "Phelps"
   hide grc "Christian"
   hide grc "3PA Cav"
   hide grc "Anderson"
   hide grc "Magilton"
   hide grc "Hartsuff"
   hide grc "Duryea"
   hide grc "PA Res"
   hide grc "2PA"
   hide gro "13PA"
   hide gra "5PA"
   hide gro "Hofmann Label"
   hide gro "Patrick Label"
```

```
hide gro "Bibbon Label"
    hide gro "Fhelps Label"
    hide gro "Christian Label"
   hide gro "3PA Cav Label"
    hide gro "Anderson Label"
    hide gro "Magilton Label"
    hide gro "Hartsuff Label"
    hide gro "Duryea Label"
    hide gro "PA Res Label"
    hide gro "1PA Label"
    hide gro "13PA Label
    hide gro "EFA Label"
    set the checkMark of the target to false
    if the theckMark of item "USA Infantry Units" of menu "Labels" of
ProjectName is true then
      set the sheckMark of item "USA Infantry Units" of menu "Labels" of
ProjectName to false
   end if
  end if
 unlock screen
end itemSelect
```

### (MENU #6: Units) ITEM #7: USA Artillery

```
on itemSelect
 Global ProjectName
  Global MapName
 setWindow wd MapName of ProjectName
 set cursor to busy
  lock screen
 if the checkMark of the target is false then
   show grc "Campbell"
   show gro "Edgell"
   show gro "Monroe"
   show gro "Reymolds"
   show gro "Ransom"
   show are "Thompson"
   show gro "Cooper"
   show grc "Matthews"
   show grd "Simpson"
   show gro "Campbell Label"
   show gro "Edgell Label"
   show grc "Monroe Label"
   show gro "Reynolds Label"
   show gro "Ransom Label"
   show gro "Thompson Label"
   show grd "Cooper Label"
   show gro "Matthews Label"
   show gro "Simpson Label"
   set the checkMark of the target to true
```

```
if the theckMark of item "USA Artillery Units" of menu "Labels" of
ProjectName is false then
      set the TheokMark of item "USA Artillery Units" of menu "Labels" of
ProjectName to true
    end if
  else
    hide gro "Campbell"
    hide gro "Edgell"
    hide gra "Monrae"
    hide gro "Reymolds"
    hide gro "Ransom"
    hide gro "Thompson"
    hide gro "Cooper"
    hide gro "Matthews"
    hide gro "Simpson"
    hide gro "Campbell Label"
    hide gro "Edgell Label"
    hide gro "Monroe Label"
    hide gro "Reynolds Label"
    hide gro "Ransom Label"
    hide gro "Thompson Label"
    hide gro "Cooper Label"
    hide gro "Matthews Label"
    hide gro "Simpson Label"
    set the checkMark of the target to false
    if the checkMark of item "USA Artillery Units" of menu "Labels" of
ProjectName is true then
      set the checkMark of item "USA Artillery Units" of menu "Labels" of
ProjectName to false
    end if
  end if
  unlock screen
end itemSelect
(MENU #7: View) ITEM #1: CSA Casualties
on itemSelect
  open wd "CSA Casualties" of project "Antietam Glossary"
end itemSelect
(MENU #7: View)
                  ITEM #2: USA Casualties
on itemSelect
```

on itemSelect open wd "USA Casualties" of project "Antietam Glossary" end itemSelect

## (MENU #7: View) ITEM #3:

on itemSelect pass itemSelect end itemSelect

#### (MENU #7: View) ITEM #4: CSA Leaders

in itemSelect
 pass itemSelect
end itemSelect

#### (MENU #7: View) ITEM #5: USA Leaders

cn itemSelect
 pass itemSelect
end itemSelect

#### (MENU #7: View) ITEM #6: -----

on itemSelect pass itemSelect end itemSelect

### (MENU #7: View) ITEM #7: CSA Order of Battle

on itemSelect

open wd "CSA Order of Battle" of project "Antietam Glossary"
end itemSelect

#### (MENU #7: View) ITEM #8: USA Order of Battle

on itemSelect open wd "USA Order of Battle" of project "Antietam Glossary" end itemSelect

#### (MENU #8: Maps) ITEM #1: Harper's Ferry - Sep 15

on itemSelect
Global ProjectName
open wd "Introduction" of ProjectName
end itemSelect

#### (MENU #8: Maps) ITEM #2: Harper's Ferry - Sep 16

on itemSelect
Global ProjectName
open wd "Harper's Ferry Sep 16" of ProjectName
end itemSelect

#### (MENU #8: Maps) ITEM #3: Harper's Ferry - Sep 17

on itemSelect
Global ProjectName
tpen wd "Harper's Ferry Sep 17" of ProjectName
end itemSelect

### (MENU #8: Maps) ITEM #4: Sharpsburg - Sep 17

on itemSelect
| Global ProjectName | open wd "Sharpsburg Sep 17" of ProjectName | end itemSelect|

### (MENU #8: Maps) ITEM #5: Cornfield

on itemSelect

Global ProjectName

open inv wd "Cornfield" of Project "Hooker's Attack 1"

go od "Cornfield Map" of inv wd "Cornfield" of Project "Hooker's Attack 1"

show wd "Cornfield" of Project "Hooker's Attack 1"

end itemSelect

### (MENU #9: Graphics) ITEM #1: Map Legend

on itemSelect
Global ProjectName
set cursor to busy
lock screen
if the checkMark of the target is false then
set the loc of wd "Map Legend" of ProjectName to the screenLoc
open wd "Map Legend" of ProjectName
set the checkMark of the target to true
else
close wd "Map Legend" of ProjectName
set the checkMark of the target to false
end if
unlock screen
end itemSelect

#### (MENU #9: Graphics) ITEM #2: Photo Markers

on itemSelect Global ProjectName Global MapName setWindow wd MapName of ProjectName set cursor to busy lock screen if the checkMark of the target is false then show cd btn "Photo Marker 1" show cd btn "Industrial Revolution" set the checkMark of the target to true else hide cd btn "Photo Marker 1" hide cd btn "Industrial Revolution" set the checkMark of the target to false end if unlock screen end itemSelect

```
(MENU #9: Graphics)
                         ITEM #3: Narrative Balloons
on itemSelect
  Global ProjectName
  set cursor to busy
   lock screen
  if the checkMark of the target is false then send showNarrativeBallcons to this cd
    show gro "On" of od "Navigator" of wd "Navigator" of ProjectName
    set the checkMark of the target to true
  else
    send hideNarrativeBalloons to this cd
    hide grd "On" of cd "Navigator" of wd "Navigator" of ProjectName
    set the checkMark of the target to false
  end if
  unlock screen
end itemSelect
MENU #10: Control) ITEM #1: Palette
on itemSelect
  Global ProjectName
  Global MapName
  set cursor to watch
  setWindow wd MapName of ProjectName
  if the checkMark of the target is false then
    open wd "Navigator" of project ProjectName
    set the checkMark of the target to true
  else
    close wd "Navigator" of project ProjectName
    set the checkMark of the target to false
  end if
end itemSelect
(MENU #10:
                Control)
                              ITEM #2:
on itemSelect
  pass itemSelect
end itemSelect
(MENU #10: Control) ITEM #3: Rewind
on itemSelect
  send "go to first card" to topwindow()
end itemSelect
(MENU #10: Control) ITEM #4: Back Step
in itemSelect
  send "go to prev card" to topwindow()
```

end itemSelect

### (MENU #10: Control) ITEM #5: Stop on itemSelect pass itemSelect end itemSelect (MENU #10: Control) ITEM #6: Step in itemSelect send "go to next card" to topwindow() end itemSelect (MENU #10: Control) ITEM #7: Play on itemSelect pass itemSelect end itemSelect (MENU #10: Control) ITEM #8: on itemSelect pass itemSelect end itemSelect (MENU #10: Control) ITEM #9: Sound On on itemSelect Global SoundIsOn set cursor to watch if the checkMark of the target is false then put "Yes" into SoundIsOn set the checkMark of the target to true else put "No" into SoundIsOn set the checkMark of the target to false end if end itemSelect (MENU #11: Hooker's Attack) ITEM #1: Situation... on itemSelect open wd "Situation" of project "Hooker's Attack 1" end itemSelect (MENU #11: Hooker's Attack) ITEM #2: 5:45 to 6:00 AM on itemSelect Global ProjectName Global ProjectPlaying put "Hocker's Attack 1" into ProjectPlaying

lock screen

```
set the log of wd "Cornfield" of ProjectPlaying to the screenLog
 open wd "Cornfield" of ProjectPlaying
 open wd "Navigator" of ProjectName
 set the checkMark of item "Palette" of menu "Control" of ProjectName to true
 unlock screen
end itemSelect
```

### (MENU #11: Hooker's Attack) ITEM #3: 6:00 to 6:45 AM

```
on inemSelect
  Global ProjectName
  Global ProjectPlaying
 set cursor to watch
 put "Hooker's Attack 2" into ProjectPlaying
  lock screen
 set the loc of wd "Cornfield" of ProjectPlaying to the screenLoc
 open wd "Cornfield" of ProjectPlaying
 open wd "Navigator" of ProjectName
 set cursor to watch
 set the checkMark of item "Palette" of menu "Control" of ProjectName to true
 unlock screen
end itemSelect
```

### (MENU #11: Hooker's Attack) ITEM #4: 6:45 to 7:00 AM

on itemSelect pass itemSelect end itemSelect

### (MENU #11: Hooker's Attack) | ITEM #5: 7:00 to 7:15 AM

on itemSelect pass itemSelect end itemSelect

### (MENU #12: Hood's Counterattack) ITEM #1: Situation...

on itemSelect --spen wd "Situation" of project "Hood's Counterattack" end itemSelect

### (MENU #12: Hood's Counterattack) ITEM #2: 7:15 to 7:45 AM

- --on itemSelect
- -- Global ProjectName
- -- Global ProjectPlaying
- -- put "Hood's Counterattack" into ProjectPlaying
- -- lock screen -- set the loc of wd "Cornfield" of ProjectPlaying to the screenLoc
- -- open wd "Cornfield" of ProjectPlaying

```
-- open wd "Navigator" of ProjectName
-- set the checkMark of item "Palette" of menu "Control" of ProjectName to
true
-- unlock screen
--end itemSelect
```

#### (MENU #12: Hood's Counterattack) ITEM #3: 7:45 to 8:15 AM

--on itemSelect
-- Global ProjectName
-- Global ProjectPlaying
-- set cursor to watch
-- put "Hood's Counterattack" into ProjectPlaying
-- lock screen
-- set the loc of wd "Cornfield" of ProjectPlaying to the screenLoc
-- open wd "Cornfield" of ProjectPlaying
-- open wd "Navigator" of ProjectName
-- set cursor to watch
-- set the checkMark of item "Palette" of menu "Control" of ProjectName to true
-- unlock screen
--end itemSelect

### (MENU #12: Hood's Counterattack) ITEM #4: 8:15 to 8:30 AM

on itemSelect
 pass itemSelect
end itemSelect

#### (MENU #12: Hood's Counterattack) ITEM #5: 8:30 to 9:00 AM

on itemSelect
 pass itemSelect
end itemSelect

#### (WD #1, BG #1, CD #1)

on showNarrativeBalloons
set cursor to watch
lock screen
show grc "Samual Mumma"
unlock screen
end showNarrativeBalloons

on hideNarrativeBalloons set cursor to watch lock screen hide gro "Samual Mumma" unlock screen end hideNarrativeBalloons

#### (WD #1, BG #1, CD #1) BUTTON #1: Introduction

on mouseUp
Global ProjectName
Global MapName
lock screen
set the loc of wd "Introduction" of ProjectName to the screenLoc
open wd "Introduction" of ProjectName
hide wd "About Antietam" of ProjectName
unlock screen
end mouseUp

#### (WD #1, BG #1, CD #1) BUTTON #2: Instructions

in mouseUp
 answer "Not avilable in this version."
end mouseUp

#### (WD #1, BG #1, CD #1) BUTTON #3: Battle Map

on mouseUp
Global ProjectName
Global MapName
set cursor to watch
lock screen
--set the loc of wd MapName of ProjectName to -1000,-1000
show menuBar
tipen inv wd MapName of ProjectName
set the scroll of wd MapName of ProjectName to 328,134
talculateWindowPect
set the rect of wd MapName of ProjectName to the result
show wd MapName of ProjectName
tipse wd "About Antietam"
unlock screen
end mouseUp

#### (WD #2, BG #1) BUTTON #1: Hooker

end mouseUp

#### (WD #2, BG #1, CD #1) BUTTON #1: Photo Marker 1

on mouseUp
open wd "Photos" of project "Color Photos"
end mouseUp

#### (WD #2, BG #1, CD #1) BUTTON #2: Industrial Revolution

on mouseUp launch "Industrial Revolution" with "Simple Player" end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #25: Hartsuff

on mouseUp

open cd "Hartsuff" of wd "USA Units"

end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #26: Duryea

on mouseUp
open cd "Duryea" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #85: Anderson

on mouseUp
open cd "Anderson" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #86: Magilton

on mouseUp
open cd "Magilton" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #89: 2PA

cn mouseUp
 open cd "2PA" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #90: 13PA

on mouseUp
open cd "13PA" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #91: 5PA

on mouseUp
open cd "5PA" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #101: Anderson Label

on mouseUp open od "Anderson" of wd "USA Units" end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #104: 2PA Label

on mouseUp
open od "2PA" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #118: 13PA Label

on mouseUp open od "13PA" of wd "USA Units" end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #119: 5PA Label

on mouseUp
open cd "5PA" of wd "USA Units"
end mouseUp

#### (WD #2, BG #1, CD #1) GRAPHIC #199: Samual Mumma

on mouseUp showNarrative end mouseUp

#### (WD #3, BG #1) BUTTON #1: Done

on mouseUp close this wd open wd "Harper's Ferry" of project "Antietam Campaign Maps" end mouseUp

#### (WD #3, BG #1) BUTTON #2: Back

on mouseUp
visual dissolve
go prev cd
end mouseUp

#### (WD #3, BG #1, CD #1) BUTTON #1: Back

on mouseUp
Global ProjectName
lock screen
close this wd
show wd "About Antietam" of ProjectName

unlock streen end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #1: On

on mouseUp
Global ProjectName
setSound 104, 105, short id of me
hide gro "Sound Off" of cd "Navigator" of wd "Navigator" of ProjectName
end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #2: Off

on mouseUp
Global ProjectName
setSound 104, 105, short id of me
show grc "Sound Off" of cd "Navigator" of wd "Navigator" of ProjectName
end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #3: Build

on mouseUp setPreference 107, 108, short id of me end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #4: Dont't Build

on mouseUp setPreference 107, 108, short id of me end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #5: OK

```
on mouseUp
Global SoundIsOn
Global ShowArtillery
if the hilite of cd btn "On" is true then
put "Yes" into SoundIsOn
else
put "No" into SoundIsOn
end if
if the hilite of cd btn "Show" is true then
put "Yes" into ShowArtillery
else
put "No" into ShowArtillery
end if
close this wd
end mouseUp
```

#### (WD #4, BG #1, CD #1) BUTTON #6: Cancel

on mouseUp close this wd end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #7: Show

on mouseUp setArtillery 107, 103, short id of me end mouseUp

#### (WD #4, BG #1, CD #1) BUTTON #8: Don't Show

on mouseUp setArtillery 107, 108, short id of me end mouseUp

#### (WD #5, BG #1) BUTTON #1: OK

on mouseUp close this wd end mouseUp

(WD #7, BG #1, CD #1) FIELD #10: Battle Time
on mouseEnter
 show help balloon at rect of me with cd fld "Battle Time Help"
end mouseEnter

#### (WD #7, BG #1, CD #1) BUTTON #1: Grabbler

cn mouseUp
 -- This first loop does nothing but hold the script until the
 -- mouse is down.
 repeat until the mouse is down
 put 5 into a
 end repeat
 -- This sends the grabber message to the topwindow()
 repeat until the mouse is up
 send "grabber" to topwindow()
 end repeat
end mouseUp

on mouseEnter
 show help balloon at rect of me with cd fld "Grabbler"
end mouseEnter

#### (WD #7, BG #1, CD #1) BUTTON #2: Rewind on mouseEnter show help balloon at rect of me with cd fld "Rewind" end mouseEnter on mouseUp send "go to first card" to topwindow() end mouseUp (WD #7, BG #1, CD #1) BUTTON #3: Back Step on mouseEnter show help balloon at rect of me with cd fld "Back Step" end mouseEnter on mouseUp send "go to prev card" to topwindow() end mouseUp (WD #7, BG #1, CD #1) BUTTON #4: Stop on mouseEnter show help balloon at rect of me with cd fld "Stop" end mouseEnter on mouseUp answer "Not available in this version." end mouseUp (WD #7, BG #1, CD #1) BUTTON #5: Step on mouseEnter show help balloon at rect of me with cd fld "Step" end mouseEnter on mouseUp Global ViewMethod put "Step" into ViewMethod send "go to next card" to topwindow() end mouseUp (WD #7, BG #1, CD #1) BUTTON #6: Play on mouseEnter show help balloon at rect of me with cd fld "Play" end mouseEnter

on mouseUp

Global ProjectName
Global ProjectPlaying

```
Global ViewMethod
put "Continuous" into ViewMethod
set cursor to watch
set the hilite of me to true
setWindow wd "Cornfield" of ProjectPlaying
if ProjectPlaying is "Hooker's Attack 1" then
  go ad "Cornfield 05:45:20"
  go ad "Cornfield 05:45:40"
  go ad "Cornfield 05:46:00"
  go cd "Cornfield 05:46:20"
  go cd "Cornfield 05:46:40"
  go cd "Cornfield 05:46:40.5"
  go cd "Cornfield 05:47:00"
  go od "Cornfield 05:47:20"
  gold "Cornfield 05:47:40"
  go cd "Cornfield 05:48:00"
  go cd "Cornfield 05:48:20"
  go cd "Cornfield 05:48:40"
  go cd "Cornfield 05:49:00"
  go cd "Cornfield 05:49:20"
  go cd "Cornfield 05:49:40"
  go cd "Cornfield 05:50:00"
  go cd "Cornfield 05:50:20"
  go cd "Cornfield 05:50:40"
  go cd "Cornfield 05:51:00"
  go cd "Cornfield 05:51:20"
  go cd "Cornfield 05:51:40"
  go ad "Cornfield 05:52:00"
  go cd "Cornfield 05:52:20"
  go cd "Cornfield 05:52:40"
  go cd "Cornfield 05:53:00"
  go cd "Cornfield 05:53:20"
  go cd "Cornfield 05:53:40"
  go ad "Cornfield 05:54:00"
  go cd "Cornfield 05:54:20"
  go cd "Cornfield 05:54:40"
  go cd "Cornfield 05:55:00"
  go cd "Cornfield 05:55:20"
  go cd "Cornfield 05:55:40"
  go cd "Cornfield 05:56:00"
  go cd "Cornfield 05:56:20"
  go cd "Cornfield 05:56:40"
  go ad "Cornfield 05:57:00"
  go cd "Cornfield 05:57:20"
  go cd "Cornfield 05:57:40"
  go cd "Cornfield 05:58:00"
  go cd "Cornfield 05:58:20"
  go cd "Cornfield 05:58:40"
  go cd "Cornfield 05:59:00"
  go cd "Cornfield 05:59:20"
  gp cd "Cornfield 05:59:40"
```

```
end if
 if ProjectPlaying is "Hooker's Attack 2" then
   go cd "Cornfield 06:00:00"
   go ad "Cornfield 06:01:00"
   go cd "Cornfield 06:02:00"
   go ad "Cornfield 06:03:00"
    go ad "Cornfield 05:04:00"
    go ad "Cornfield 06:05:00"
   go ad "Cornfield 05:05:00"
   go cd "Cornfield 06:07:00"
   go od "Cornfield 06:03:00"
   go od "Cornfield 06:09:00"
   go od "Cornfield 05:10:00"
   go ad "Cornfield 06:11:00"
   go od "Cornfield 06:12:00"
   go cd "Cornfield 06:13:00"
   go cd "Cornfield 06:14:00"
   go cd "Cornfield 05:15:00"
   go cd "Cornfield 06:16:00"
   go cd "Cornfield 06:17:00"
   go cd "Cornfield 06:18:00"
   go cd "Cornfield 06:19:00"
   go cd "Cornfield 06:20:00"
    go cd "Cornfield 05:21:00"
   go cd "Cornfield 06:22:00"
   go ad "Cornfield 06:23:00"
    go cd "Cornfield 06:24:00"
   go cd "Cornfield 06:25:00"
    go cd "Cornfield 06:26:00"
    go cd "Cornfield 06:27:00"
   go cd "Cornfield 06:28:00"
    go od "Cornfield 06:29:00"
    go cd "Cornfield 06:30:00"
    go cd "Cornfield 06:31:00"
    go cd "Cornfield 06:32:00"
    go cd "Cornfield 06:33:00"
    go ad "Cornfield 06:34:00"
    go cd "Cornfield 06:35:00"
    go cd "Cornfield 06:36:00"
    go rd "Cornfield 06:37:00"
    go od "Cornfield 06:38:00"
    go cd "Cornfield 06:39:00"
    go cd "Cornfield 06:40:00"
    go ad "Cornfield 06:41:00"
    go cd "Cornfield 06:42:00"
    go ad "Carnfield 06:43:00"
    go ad "Cornfield 06:44:00"
    go ad "Cornfield 06:45:00"
  end if
  set the hilite of me to false
end mouseUp
```

#### (WD #7, BG #1, CD #1) BUTTON #7: Done

```
cn mouseEnter
  show help balloon at rect of me with cd fld "Done"
end mouseEnter

on mouseUp
  Global ProjectPlaying
  close this wd
  close wd "Cornfield" of project "Hooker's Attack 1"
  close wd "Step Marrative" of ProjectPlaying
end mouseUp
```

#### (WD #7, BG #1, CD #1) BUTTON #8: Sound

```
on mouseEnter
  show help balloon at rect of me with cd fld "Sound"
end mouseEnter
on mouseUp
 Global ProjectName
 Global SoundIsOn
  if SoundIsOn is "Yes" then
   put "No" into SoundIsOn
    set the hilite of cd btn "On" of cd "Preferences" of wd "Preferences" of
ProjectName to false
    set the hilite of cd btn "Off" of cd "Preferences" of wd "Preferences" of
ProjectName to true
   show gro "Sound Off"
  else
   put "Yes" into SoundIsOn
    set the hilite of cd btn "On" of cd "Preferences" of wd "Preferences" of
ProjectName to true
    set the hilite of cd btn "Off" of cd "Preferences" of wd "Preferences" of
ProjectName to false
   hide gra "Sound Off"
  end if
end mouseUp
```

#### (WD #7, BG #1, CD #1) BUTTON #9: Balloon Help

```
cn mouseEnter
  show help balloon at rect of me with cd fld "Balloon Help"
end mouseEnter

on mouseUp
  if the helpBalloons is false then
    set the helpBalloons to true
  else
    set the helpBalloons to false
  end if
end mouseUp
```

show help balloon at rect of me with cd fld "Marrative Balloons"

#### (WD #7, BG #1, CD #1) BUTTON #10: Narrative Balloons

end mouseEnter on mouseUp Global ProjectName Plobal ProjectPlaying Global CurrentCard if the checkMark of item "Narrative Balloons" of menu "Graphics" of ProjectName is false then set the checkMark of item "Narrative Balloons" of menu "Graphics" of ProjectName to true send showNarrativeBalloons to od CurrentCard of wd "Cornfield" of ProjectPlaying show gra "On" else set the checkMark of item "Narrative Balloons" of menu "Graphics" of ProjectName to false send hideNarrativeBalloons to cd CurrentCard of wd "Cornfield" cf ProjectPlaying hide gra "On" end if end mouseUp

#### (WD #7, BG #1, CD #1) GRAPHIC #11: Battle Time

on mouseEnter

in mouseEnter

show help balloon at rect of me with cd fld "Battle Time Help" end mouseEnter

#### (WD #8, BG #1, CD #1) BUTTON #1: Done

on mouseUp

send itemSelect to item "Map Legend" of menu "Graphics" end mouseUp  $\,$ 

#### (WD #10, BG #1, CD #1) GRAPHIC #2: ID 111

on mouseDown show ad fld "

show cd fld "Campbell Info"

end mouseDown

on mouseUp

hide cd fld "Campbell Info"

end mouseUp

#### in mouseDown show od fld "Duryea Info" end mouseDown in mouselip - hide od fld "Duryea Info" end mouseUp (WD #10, BG #2, CD #3) GRAPHIC #1: 3d Bde Info on mouseDown shaw ad fld "3d Bde Info" end mouseDown in mouseUp hide od fld "3d Bde Info" end mouseUp (WD #10, BG #2, CD #3) GRAPHIC #2: Hartsuff Info in mouseDown show od fld "Hartsuff Info" end mouseDown on mouseUp hide of fld "Hartsuff Info" end mouseUp

#### (WD #10, BG #2, CD #4) GRAPHIC #1: 3d Bde Info

(WD #10, BG #2, CD #2) GRAPHIC #1: ID 112

on mouseDown show od flå "ld Bde Info" end mouseDown on mouseUp hide od fld "3d Bde Info" end mauseUp

#### (WD #10, BG #2, CD #4) GRAPHIC #2: Anderson Info

in mouseDown show od fld "Anderson Info" end mouseDown in mauseUp hide od fld "Anderson Info" end mouseUp

#### (WD #10, BG #2, CD #5) GRAPHIC #1: 3PA Cav

cn mouseDown
 show cd fld "3PA Cav Info"
end mouseDown

on mouseUp
 hide cd fld "3PA Cav Info"
end mouseUp

#### (WD #11, BG #1) BUTTON #1: Done

on mouseUp close this wd end mouseUp

### Hooker's Attack 1 PROJECT SCRIPT

```
-- Version 1.0bl6
on startUp
 lock screen
  set the loc of wd l of this project to -1000,-1000
 unlock screen
 go project "Antietam Staff Ride"
end startUp
on closeProject
 Global ProjectName
  set cursor to watch
  set numberformat to "0"
  put the freesize of this project into the Size
  if the Size > 200 then
   set the loc of wd "Notes" of ProjectName to the screenLoc
   put "Compacting the file "&return & Project Name & "... " into-
   bg fld "Message" of cd "Note 1" of wd "Notes" of ProjectName
   open wd "Notes" of ProjectName
   Compact
   close wd "Notes" of ProjectName
  end if
end closeProject
on showNarrative
 Global ProjectPlaying
 set cursor to watch
 put the short name of the target into cardName
  set the loc of wd "Marrative" of ProjectPlaying to the screenLoc
  spen od pardName of wd "Narrative" of ProjectPlaying
end showNarrative
```

#### WINDOW #1: Cornfield

on openWindow
Global ProjectName
hide menuBar
if ProjectName is "Antietam Staff Ride" then
insert menu "Control" of ProjectName
end if
end openWindow

on closeWindow
Global ProjectName
show MenuBar
if ProjectName is "Antietam Staff Ride" then
remove menu "Control" of ProjectName
end if
end closeWindow

#### (WD #1) BACKGROUND #1: Cornfield

on showNarrativeBalloons
answer "There are no narrative balloons on this map."
end showNarrativeBalloons
on hideNarrativeBalloons
answer "There are no narrative balloons on this map."
end hideNarrativeBalloons

#### (WD #1, BG #1, CD #1) FIELD #1: Major Von Borcke

in mouseDown hide me end mouseDown

#### (WD #1, BG #1, CD #1) GRAPHIC #39: Sergeant Moore

on mouseUp showNarrative end mouseUp

#### (WD #1, BG #1, CD #1) GRAPHIC #40: Major Von Borcke

in mouseUp
 showNarrative
end mouseUp

#### (WD #1, BG #1, CD #1) GRAPHIC #41: Private Worsham

in mouseUp
 showNarrative
end mouseUp

#### (WD #1, BG #1, CD #1) GRAPHIC #42: Major General Hooker

in mouseUp showNarrative end mouseUp

#### (WD #2, BG #1) BUTTON #1: Back

```
on mouseUp
  Global ShowArtillery
  if ShowArtillery is "No" then get the num of this od
    put it - 1 into prevCard
    if prevCard is 0 then
      close this wd
      exit mouseUp
    end if
    get the short name of card prevCard
    put last word of it into cardType
    put first word of it into commanderName
    put prevCard - 1 into cardBeforePrev
    if commanderName is "Jones'" then
      put prevCard - 4 into cardBeforePrev
    end if
    if commanderName is "Hood's" then
      put prevCard - 2 into cardBeforePrev
    end if
    if commanderName is "Stuart's" then
      close this wd
      exit mouseUp
    end if
    if cardType is "Artillery" then
      visual scroll right fast
      go cd cardBeforePrev
    else
      visual scroll right fast
      go prev cd
    end if
  else
    visual scroll right fast
    go previd
  end if
end mouseUp
```

#### (WD #2, BG #1) BUTTON #2: Next

```
on mouseUp
  Global ShowArtillery
  if ShowArtillery is "No" then
   get the num of this cd
  put it + 1 into nextCard
  get the short name of card nextCard
```

```
put last word of it into cardType
   put first word of it into commanderName
   put nextCard + 1 into cardAfterNext
    if commanderName is "Jones'" then
     put nextCard + 4 into cardAfterNext
   end if
    if commanderName is "Hood's" then
     put nextCard + 2 into dardAfterNext
    end if
    if commanderName is "Stuart's" then
     go last od
      exit mouseUp
    end if
    if cardType is "Artillery" then
     visual scroll left fast
      go cd cardAfterNext
   else
     visual scroll left fast
     go next cd
   end if
 else
   visual scroll left fast
   go next cd
  end if
end mouseUp
```

#### (WD #2, BG #1, CD #38) BUTTON #1: ID 108

```
on mouseUp
Global ProjectName
Global ProjectPlaying
close this wd
put "Hooker's Attack 1" into ProjectPlaying
lock screen
set the loc of wd "Cornfield" of ProjectPlaying to the screenLoc
open wd "Cornfield" of ProjectPlaying
open wd "Navigator" of ProjectName
set the checkMark of item "Palette" of menu "Control" of ProjectName to true
unlock screen
end mouseUp
```

#### (WD #3, BG #1, CD #3) BUTTON #1: Common Time

```
on mouseUp
lock screen
put the short name of me into cardName
set the loc of wd "Glossary" of project "Antietam Glossary" to the screenLcc
open od cardName of wd "Glossary" of project "Antietam Glossary"
unlock screen
end mouseUp
```

#### (WD #3, BG #1, CD #3) BUTTON #2: Columns of Divisions

on mouseUp
lock screen
put the short name of me into cardName
set the loc of wd "Glossary" of project "Antietam Glossary" to the screenLoc
open od cardName of wd "Glossary" of project "Antietam Glossary"
unlock screen
end mouseUp

#### (WD #3, BG #1, CD #4) BUTTON\_#1: Limber

on mouseUp

look screen

put the short name of me into tardName

set the loc of wd "Glossary" of project "Antietam Glossary" to the screenLoc

open od tardName of wd "Glossary" of project "Antietam Glossary"

unlock screen
end mouseUp

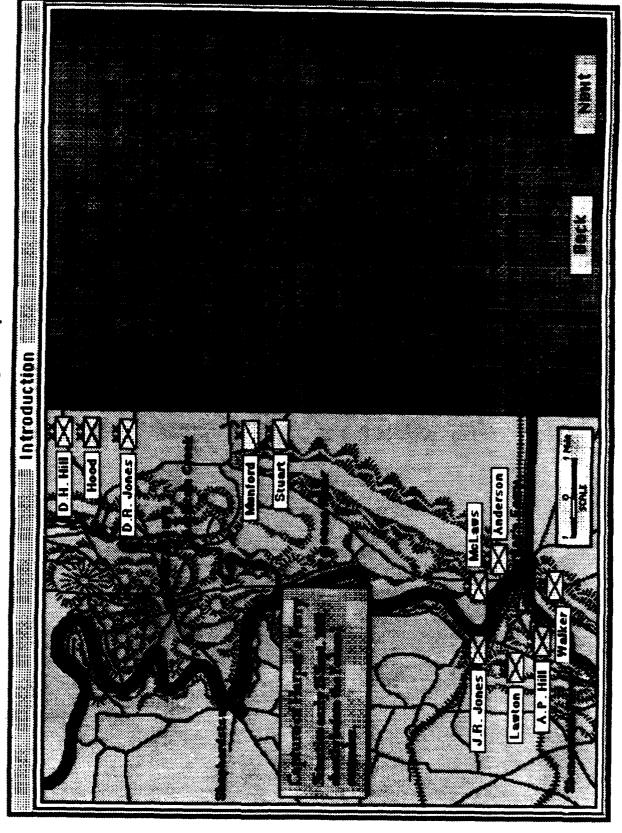
#### (WD #3, BG #1, CD #9) BUTTON #1: Skirmishers

on mouseUp
lock screen
put the short name of me into cardName
set the loc of wd "Glossary" of project "Antietam Glossary" to the screenLoc
open cd cardName of wd "Glossary" of project "Antietam Glossary"
unlock screen
end mouseUp

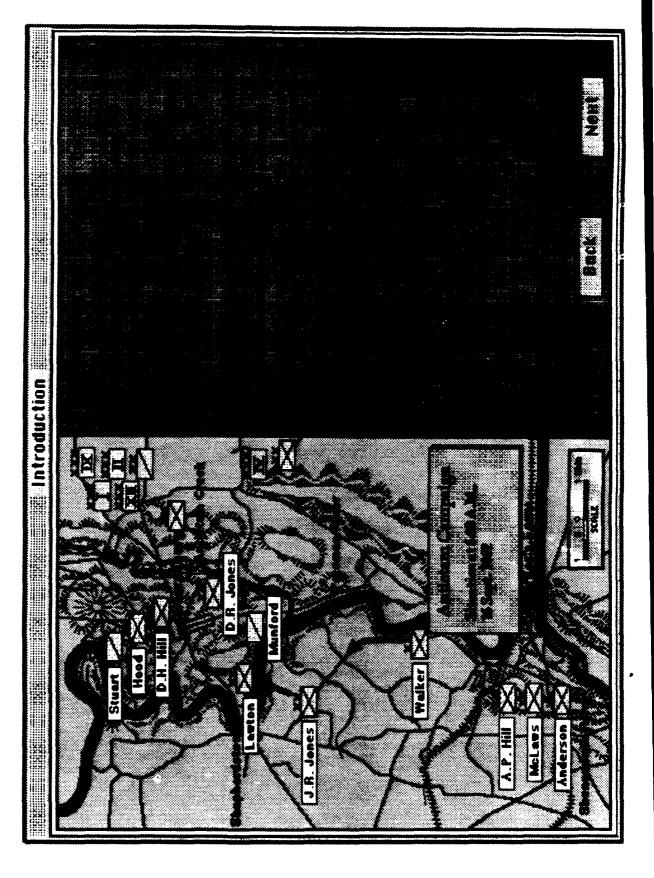
#### (WD #4, BG #1) BUTTON #1: Done

in mouseUp
close this wd
end mouseUp

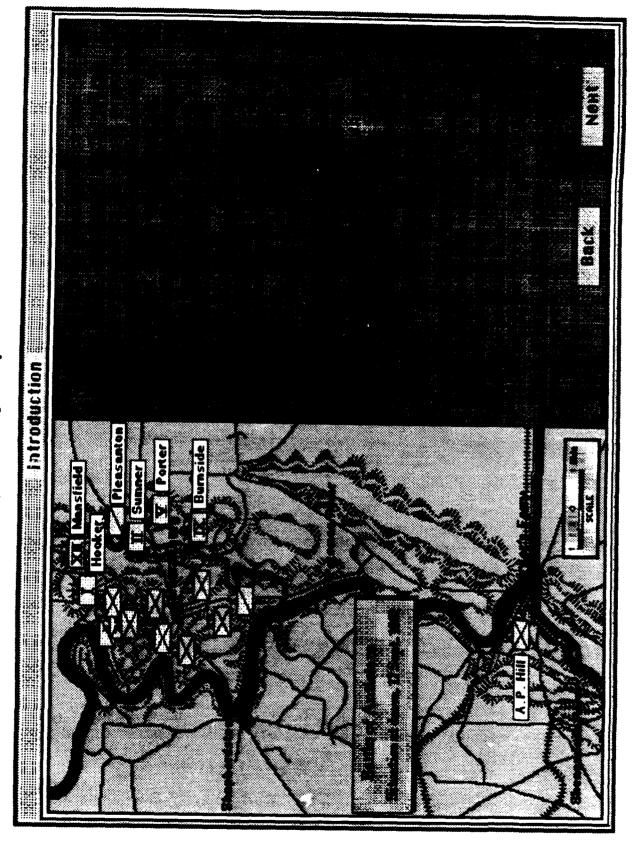
Appendix B. Introduction Maps Harper's Ferry - Sep 15



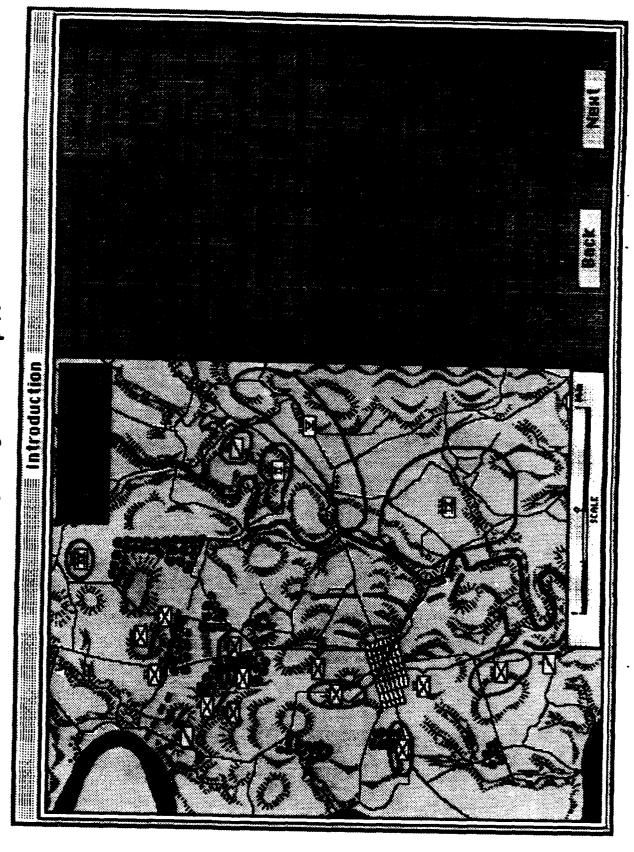
# Appendix B. Introduction Maps Harper's Ferry - Sep 16

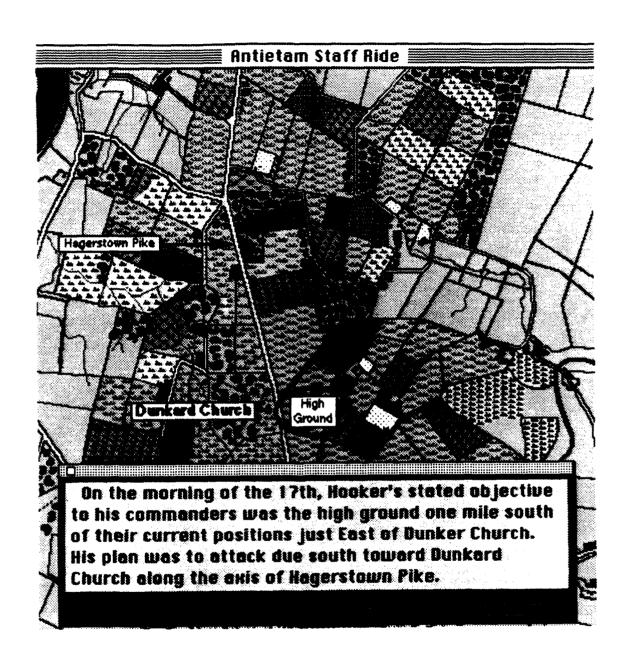


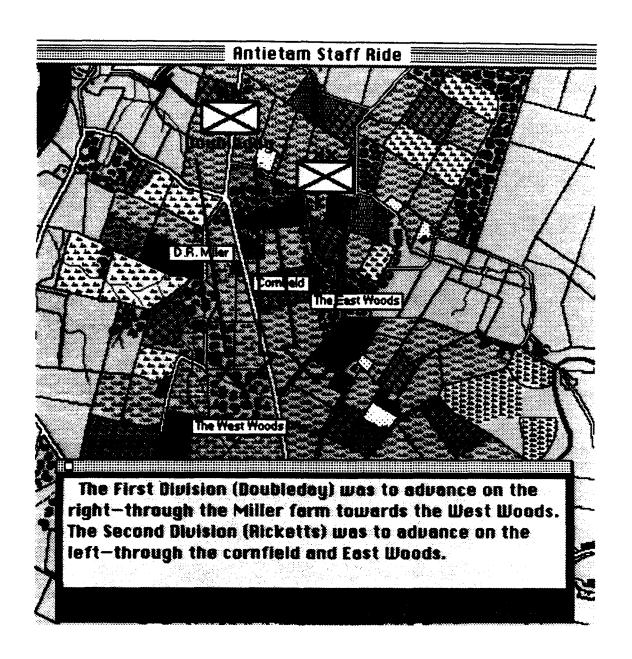
# Appendix B. Introduction Maps Harper's Ferry - Sep 17



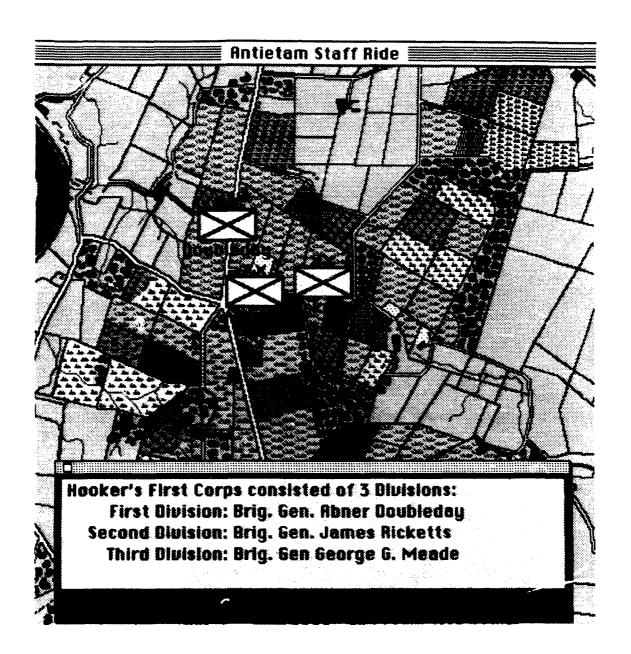
Appendix B. Introduction Maps Sharpsburg - Dawn Sep 17

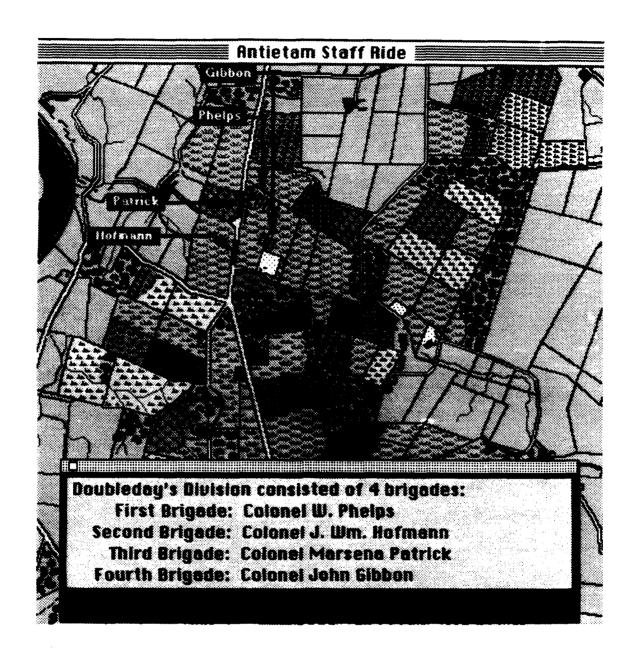


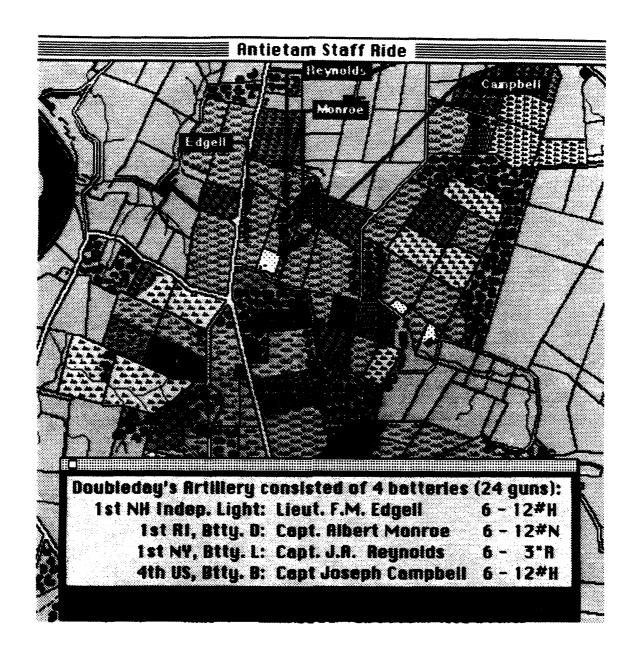












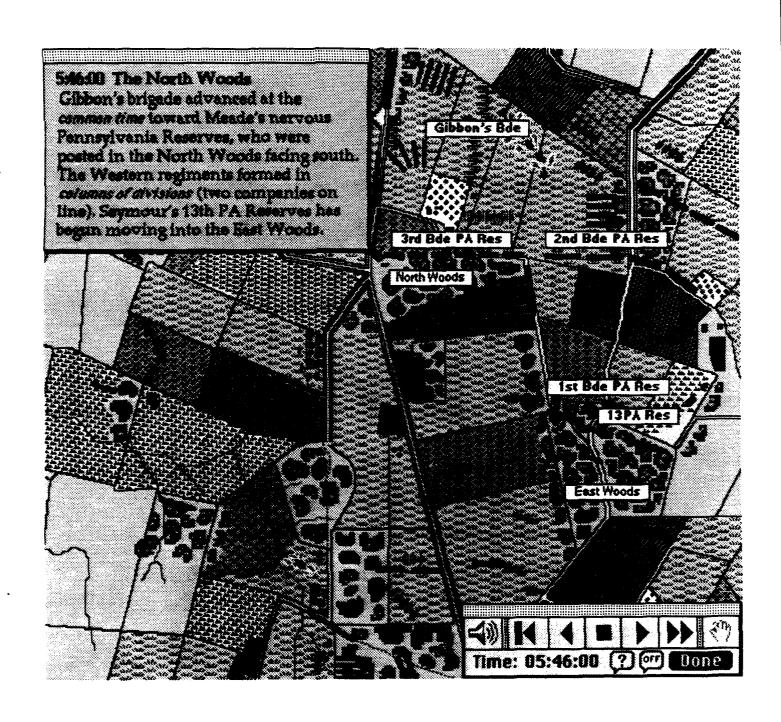
# Appendix D. Animated Sequence of Hooker's Attack: 1st Overlay (Time 5:45:20)



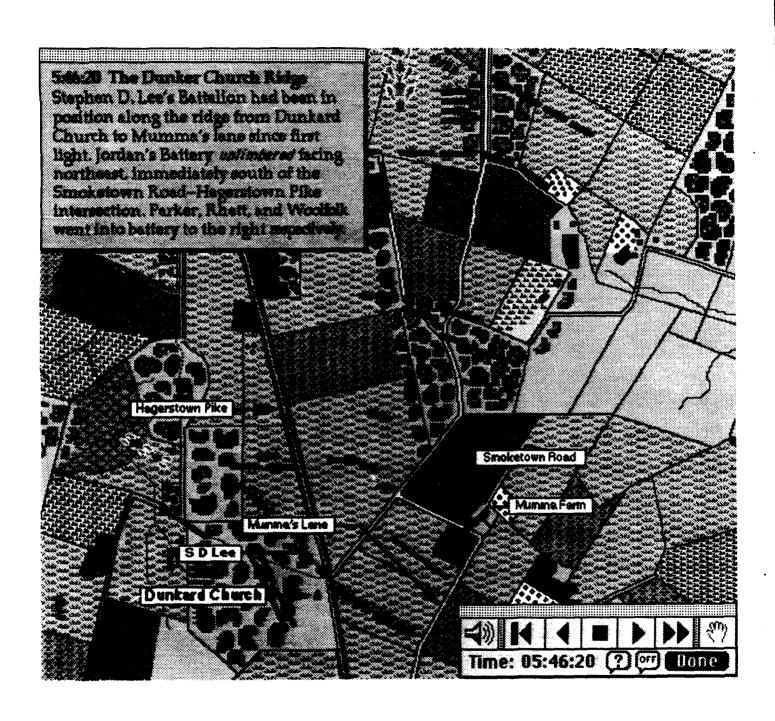
# Appendix D. Animated Sequence of Hooker's Attack: 2nd Overlay (Time 5:45:40)



# Appendix D. Animated Sequence of Hooker's Attack: 3rd Overlay (Time 5:46:00)



# Appendix D. Animated Sequence of Hooker's Attack: 4th Overlay (Time 5:46:20)



# Appendix D. Animated Sequence of Hooker's Attack: 6th Overlay (Time 5:47:00)



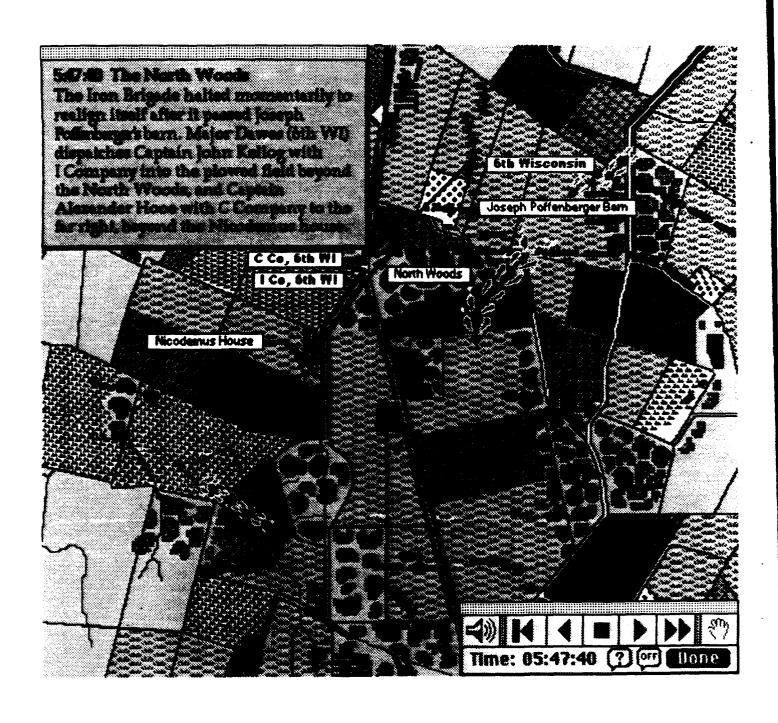
# Appendix D. Animated Sequence of Hooker's Attack: 5th Overlay (Time 5:46:40)



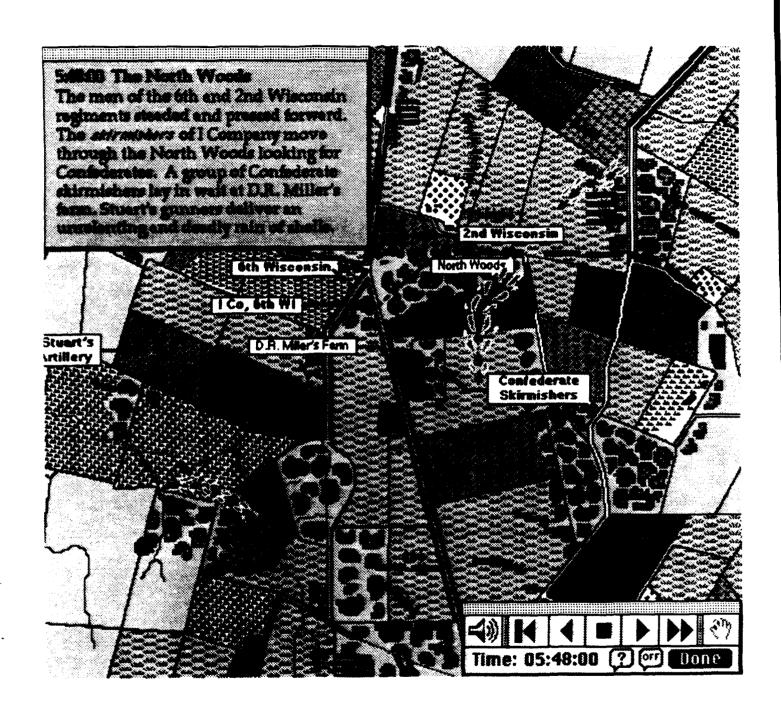
# Appendix D. Animated Sequence of Hooker's Attack: 7th Overlay (Time 5:47:20)



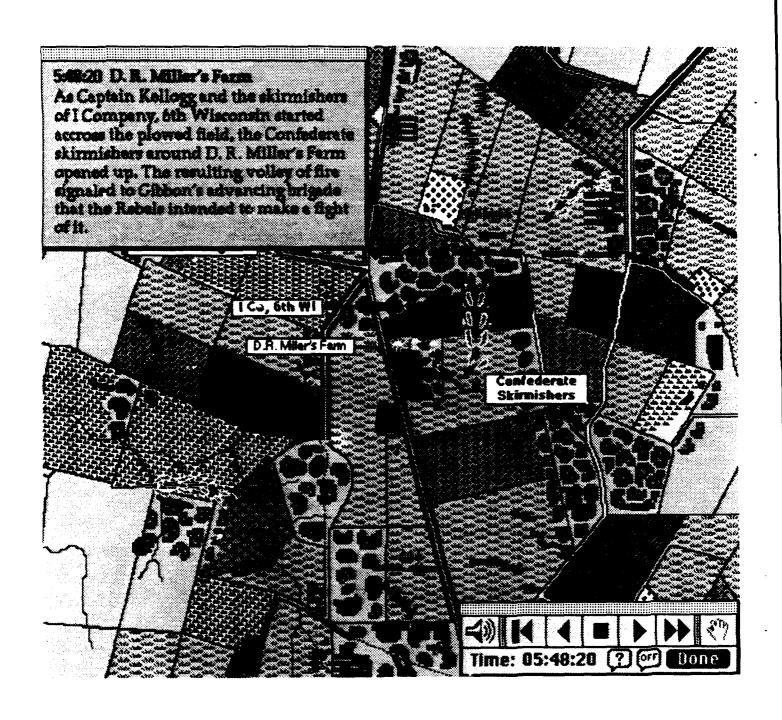
# Appendix D. Animated Sequence of Hooker's Attack: 8th Overlay (Time 5:47:40)



# Appendix D. Animated Sequence of Hooker's Attack: 9th Overlay (Time 5:48:00)

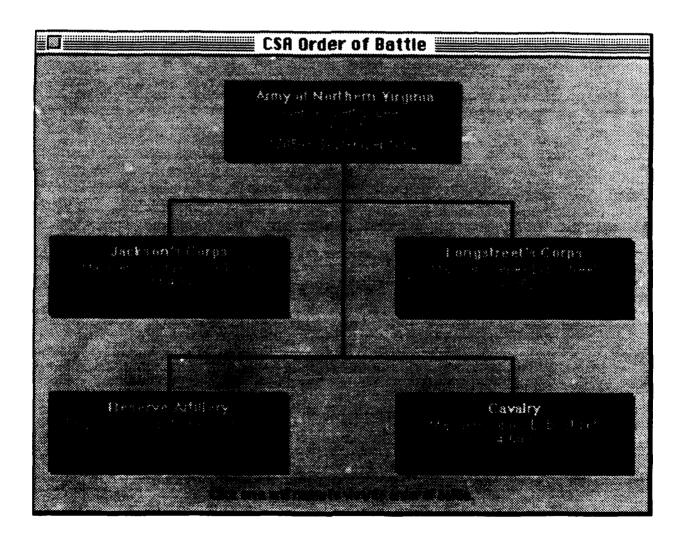


# Appendix D. Animated Sequence of Hooker's Attack: 10th Overlay (Time 5:48:20)



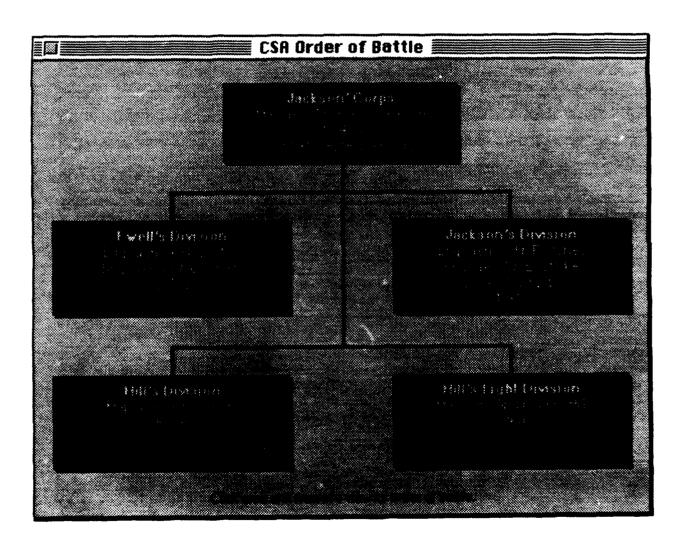
### Appendix E. Order of Battle Example: Army of Northern Virginia

To open this window, choose CSA Order of Battle from the View menu. Each of the shadowed boxes on the card are buttons and, when clicked on, go to a card showing that unit's order of battle diagram. If you click on the shadowed box representing Jackson's Corps, the card on the next page will appear in the window. When finished viewing order of battle data, close the window by clicking in the box at the top left corner of the window's title bar.



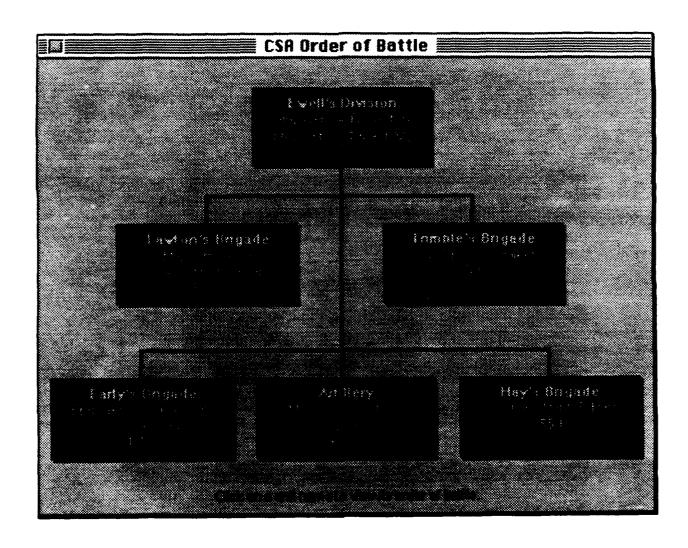
### Appendix E. Order of Battle Example: Jackson's Corps

If you click on the shadowed box representing Ewell's Division, the card on the next page will appear in the window. If you click on the shadowed box representing Jackson's Corps, the card on the preceding page will appear in the window. When finished viewing order of battle data, close the window by clicking in the box at the top left corner of the window's title bar.



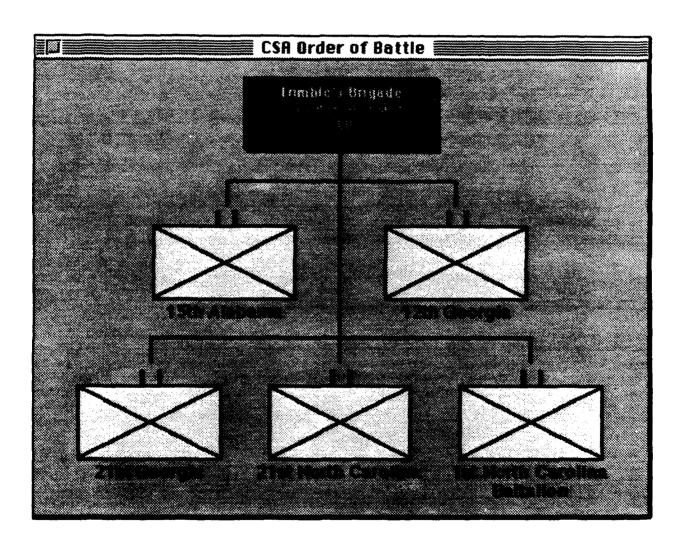
### Appendix E. Order of Battle Example: Ewell's Division

If you click on the shadowed box representing Trimble's Brigade, the card on the next page will appear in the window. If you click on the shadowed box representing Ewell's Division, the card on the preceding page will appear in the window. When finished viewing order of battle data, close the window by clicking in the box at the top left corner of the window's title bar.

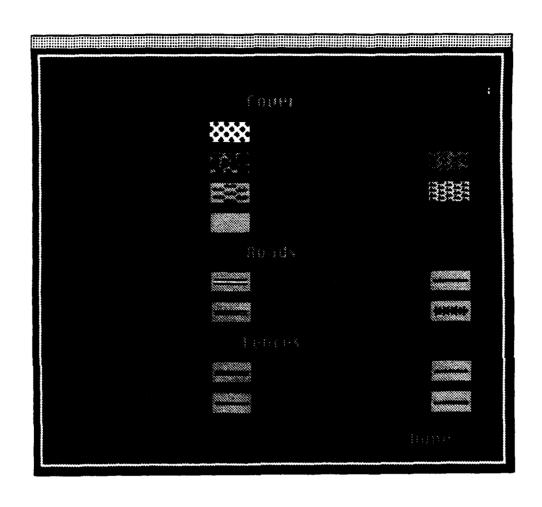


### Appendix E. Order of Battle Example: Trimble's Brigade

This is the lowest level for which order of battle is provided. If you click on the shadowed box representing Trimble's Brigade, the card on the preceding page will appear in the window. When finished viewing order of battle data, close the window by clicking in the box at the top left corner of the window's title bar.



### Appendix F. Map Legend



Appendix G. Disk Install Set	
	·
	•
106	

#### Notes\*

- <sup>1</sup> Aldus SuperCard<sup>®</sup>, Version 1.6, Computer Software (San Diego, CA: Silicon Beach Software, Inc., 1991). Disk.
- <sup>2</sup> Kawasaki. Guy, Selling the Dream: How to Promote Your Product, Company, or Ideas—and Make a Difference—Using Everyday Evangelism (New York: HarperCollinsPublishers, 1991), 111.
- <sup>3</sup> Himes, Andrew and Craig Ragland, *Inside SuperCard: The Complete Guide for Macintosh® Developers and Advanced Users* (Redmond, WA: Microsoft Press, 1990), 4.
- <sup>4</sup> Gookin, Dan, *The Complete SuperCard™ Handbook* (Rannor, PA: Compute Books, 1989), vii.
- <sup>5</sup> Burns, Tom, and Gary Poppitz, SuperTalk™, The SuperCard™ Language Guide, Version 1.5 (San Diego, CA: Silicon Beach Software, Inc., 1989-90), 3.
- <sup>6</sup> Kawasaki, 323.
- <sup>7</sup> Cope, E. B. and H. W. Mattern, *Atlas of the Battlefield of Antietam* (Chief of Engineers, U.S. Army, 1904).
- 8 The West Point Civil War Atlas, (New York, 1958), 35-38.
- <sup>9</sup> Appleton, Bill, Ben Calica, Kevin Larue, and John Petit, SuperCard™ Version 1.0 User Manual (San Diego, CA: Silicon Beach Software, Inc., 1989), 1-3,1-4.
- <sup>10</sup> Appleton, Bill, and Gary Poppitz, SuperCard™ Version 1.5 User Manual Addendum (San Diego, CA: Silicon Beach Software, Inc., 1990), 4-6, 4-7.
- <sup>11</sup> Priest, John M. *Antietam: The Soldier's Battle*, (Shippensburg, PA: White Maine Publishing Company, Inc., 1989), vii.
- <sup>12</sup> Kawasaki, 153.
- \*This set of notes only acknowledges sources and ideas used in this paper. Another set of notes is in The Antietam Staff Ride application. It can be accessed by selecting the submenu command **Notes** from the **View** menu.

#### Bibliography\*

Aldus SuperCard<sup>®</sup>. Version 1.6. Computer Software. San Diego, CA: Silicon Beach Software, Inc., 1991. Disk.

Apple® Human Interface Guidelines: The Apple Desktop Interface. Reading, MA: Addison-Wesley Publishing Company, Inc., 1987.

Appleton, Bill, and Gary Poppitz. SuperCard™ Version 1.5 User Manual Addendum. San Diego, CA: Silicon Beach Software, Inc., 1990.

Appleton, Bill, Ben Calica, Kevin Larue, and John Petit. SuperCard™ Version 1.0 User Manual. San Diego, CA: Silicon Beach Software, Inc., 1989.

Bailey, Ronald H. and the Editors of Time-Life Books. "The Bloodiest Day, The Battle of Antietam" THE CIVIL WAR. Alexandria, VA: Time-Life Books, 1984.

Boatner, Mark M. III. *The Civil War Dictionary*. New York: Vintage Books, 1991.

Burns, Tom, and Gary Poppitz. SuperTalk<sup>TM</sup>, The SuperCard<sup>TM</sup> Language Guide, Version 1.5. San Diego, CA: Silicon Beach Software, Inc., 1989-90.

Catton, Bruce Mr. Lincoln's Army, Garden City, NY: Doubleday and Co., 1965.

Commanger, Henry Steele, (ed.). *The Blue and the Gray*. Indianapolis, IN: The Bobbs-Merrill Co., Inc., 1950.

Cope, E. B. and H. W. Mattern. Atlas of the Battlefield of Antietam. Chief of Engineers, U.S. Army, 1904.

Frassanito, William A. Antietam: The Photographic Legacy of America's Bloodiest Day. New York: Charles Scribner's Sons, 1978.

Gookin, Dan. The Complete SuperCard™ Handbook. Rannor, PA: Compute Books, 1989.

<sup>\*</sup> This bibliography lists the works cited in this paper and in the application The Antietam Staff Ride.

Himes, Andrew and Craig Ragland. *Inside SuperCard: The Complete Guide for Macintosh® Developers and Advanced Users.* Redmond, WA: Microsoft Press, 1990.

HyperCard<sup>®</sup>. Version 2.1, computer software. Cupertino, CA: Apple Computer, Inc., 1991. Disk.

Kawasaki, Guy. Selling the Dream: How to Promote Your Product, Company, or Ideas—and Make a Difference—Using Everyday Evangelism. New York: HarperCollinsPublishers, 1991.

LaRue, Kevin, and Christopher Watson. Aldus SuperCard®, Addendum, Version 1.6. San Diego, CA: Silicon Beach Software, Inc., 1991.

Luvass, Jay, and Harold W. Nelson, eds. The U.S. Army War College Guide to the Battle of Antietam: The Maryland Campaign of 1862. New York: HarperCollins Publishers, 1987.

Murfin, James V. *The Gleam of Bayonets*. Baton Rouge and London,: Louisiana State University Press, 1965.

Priest, John M. Antietam: The Soldier's Battle. Shippensburg, PA: White Maine Publishing Company, Inc., 1989.

Schildt, John W. Drums Along the Antietam. Parsons, WV: McClain Printing Co., 1972.

Sears, Stephen W. Landscape Turned Red: The Battle of Antietam, New York: Warner Books, Inc., 1983.

The West Point Civil War Atlas, New York, 1958.